SOUTHERN PACIFIC COMPANY

(PACIFIC SYSTEM.)

138

TIME TABLE

FOR THE

SAN JOAQUIN DIVISION

To Take Effect Sunday, February 12, 1922, at 12:01 A. M.

PACIFIC STANDARD TIME (120th MERIDIAN)

For the government and information of employes only, and not intended for the use of the public.

J. H. DYER,	T. H. WILLIAMS,	G. F. RICHARDSON,	R. L. RUBY,
General Manager.	*Assistant General Manager.*	*Superintendent of Transportation*	*Assistant Superintendent of Transportation.*

FRESNO AND BAKERSFIELD SUBDIVISION

EASTWARD

Time Table No. 138

February 12, 1922.

Capacity of sidings in car lengths and location of Scales, Fuel, Water, Turning and Telephone Stations.	THIRD CLASS			FIRST CLASS									Distance from San Francisco		STATIONS		
	252	248	212	26	50	60	8	90	10	108	86	92					
	Sunset Manifest Freight	Local Freight	Local Freight	The Owl	San Joaquin Valley Passenger	The Sacramento	San Francisco Los Angeles Passenger	Fresno Bakersfield Passenger	Santa Fe Passenger	Fresno Los Angeles Express	Oil Fields Passenger	Fresno Visalia Passenger					
	Leave Daily	Leave Daily Ex. Sunday	Leave Daily Ex. Sunday	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily					
WFTOPY Yard	1.50PM		2.30AM	11.40PM	11.10PM	10.30PM	7.00PM				7.45AM	6.50AM	205.5	Automatic Block Signals.	DN-R **FRESNO**	2.8	Double Track
											f		208.3		CALWA	0.8	
IP	2.10		2.55	11.51	11.21	10.41	7.11				7.56	7.01	209.1		**CALWA TOWER** A. T. & S. F. Crossing	1.3	
69 P	2.15		3.00	11.53	11.23	10.43	s 7.13				s 7.58	s 7.03	210.4		MALAGA	4.7	
91	2.30		**3.35**	11.59PM	**11.29**	10.50	s 7.23				s 8.06	s 7.11	215.1		D FOWLER	1.3	
											f		216.4		STAR (Spur)	3.2	
													219.6		WINEDALE	1.1	
135W	2.47		4.20	12.06AM	11.36	f 10.57	s 7.35				s 8.18	s 7.21	220.7		D SELMA	4.9	
91 W	3.06		**5.01**	12.13	11.43	**11.04**	s 7.46				s **8.30**	s 7.30	225.6		DN KINGSBURG	1.5	
													227.1		SUMNER (Spur)	4.2	
67 P	**3.26**		5.30	12.20	11.50	11.11	f 7.56				f 8.39	f **7.39**	231.3		TRAVER	2.4	
67 P	3.31		5.35	12.23	11.53PM	11.14	7.59				8.42	7.42	233.7		CROSS	5.4	
102WFYOP	4.01	**6.00AM**	5.50AM	12.30	12.01AM	11.21	s 8.25				s 8.50 **9.00**	s 7.55AM	239.1		DN-R **GOSHEN JCT.**	6.5	
68 P	4.25	**6.25**		12.38	(Runs via Porterville)	11.29	f 8.35	(Runs via Porterville)		(Runs via Porterville)	f 9.10		245.6		TAGUS	4.1	
I													249.7		A. T. & S. F. CROSSING	0.3	
99W	4.55	7.30		f 12.45		f 11.36	s 8.55				s 9.22		250.0		DN TULARE	1.5	
													251.5		BURLING (Spur)	4.3	
68 P	**5.19**	7.45		12.54		11.44	9.05				f 9.32		255.8		OCTOL	4.6	
91 W	6.10	**8.27**		1.01		11.51	s 9.17				s **9.42**		260.4		D TIPTON	3.3	
											f		263.7		QUAIL	3.1	
67	6.48	**8.47**		1.11		11.59PM	s 9.30				s 9.53		266.8		D PIXLEY	5.6	
93	7.10	9.30		**1.20**		12.06AM	s 9.41				s 10.02		272.4		D EARLIMART	3.4	
													275.8		STONE (Spur)	0.7	
69 P	7.25	9.45		1.26		12.12	9.49				f 10.08		276.5		RADNOR	4.2	
93 W	7.55	**10.18**		1.32		12.18	s 10.01				s **10.18**		280.7		DN DELANO	6.3	
69	8.20	**11.00AM**		1.40		12.26	s 10.15				s 10.29		287.0		D McFARLAND	3.9	
													290.9		HUNT (Spur)	1.7	
90TW	8.45	12.10PM		**1.47**	2.22AM	12.33	f 10.30	10.15PM	5.12PM	10.46AM	**10.37**		292.6		DN-R **FAMOSO**	3.3	
68 P	9.05	**12.29**		1.51	2.27	12.37	10.36	f 10.20	5.16	f 10.51	10.41		295.9		SLATER	3.7	
													299.6		DOW (Spur)	0.9	
90 P	9.25	12.45		1.57	2.33	**12.43**	10.43	f 10.28	5.23	f 10.58	10.47		300.5		LERDO	5.3	
68 P	9.45	1.00		2.04	2.40	12.53	10.50	f 10.37	5.30	f 11.07	10.54		305.8		SACO	2.8	
91	9.55	1.07		2.08	2.44	12.57	10.54	10.42	s 5.35PM	f 11.11	10.58		308.6		DNR **OIL JCT.**	2.5	
61 P	10.05	1.15		2.12	**2.49**	1.01	10.58	10.47		11.15	11.03		311.1		NOME	1.8	
Yard WFTYOP	10.20PM	1.30PM		s 2.19AM	s 2.57AM	s **1.08AM**	s 11.05PM	s 10.55PM		s 11.22AM	s 11.10AM		312.9		DN-R **BAKERSFIELD**		
	Arrive Daily	Arrive Daily Ex. Sunday	Arrive Daily Ex. Sunday	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily			(107.4)		
	(8.30) 12.61	(7.30) 9.81	(3.20) 10.08	(2.39) 40.52	(1.26) 37.60	(2.38) 40.78	(4.05) 26.30	(0.40) 30.45	(0.23) 41.73	(0.36) 33.83	(3.25) 31.48	(1.05) 31.01			..................Time over District ....Average speed per hour		

Westward trains are superior to trains of the same class in the opposite direction.
Exception: No. 212 is superior to No. 213.

Santa Fe schedules originate and terminate at Santa Fe Junction switch opposite section house at Oil Junction.

ADDITIONAL STOPS

No 8 will stop on signal at all stations west of Bakersfield to receive passengers for stations east thereof.

No. 50 will stop on signal at all stations to receive passengers for Yuma or east, and stop at Selma and Kingsburg to discharge passengers from Tracy and points west.

No. 86 will stop at any station Famoso to Bakersfield to discharge passengers.

WESTWARD

Time Table No. 138

February 12, 1922.

Double Track (Fresno–Calwa Tower)

Automatic Block Signals

			FIRST CLASS								THIRD CLASS		
		Distance from Bakersfield	25	59	49	109	81	5	107	87	247	213	251
			The Owl	The Sacramento	San Joaquin Valley Passenger	Sunset Express	Bakersfield Fresno Passenger	Santa Fe Passenger	Los Angeles Fresno Express	Oil Fields Passenger	Local Freight	Local Freight	Sunset Manifest Freight
	STATIONS		Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily Ex. Sunday	Arrive Daily Ex. Sunday	Arrive Daily
DN-R	**FRESNO**	107.4	s 3.00AM	s 3.55AM	s 5.45AM		s 10.15AM		s 7.05PM	s 11.55PM		10.45AM	5.30PM
	2.8 CALWA	104.6											
	0.8 **CALWA TOWER** A. T. & S. F. Crossing	103.8	2.50	3.45	5.31		10.05		6.52	11.43		10.25	5.00
	1.3 MALAGA	102.5	2.47	3.42	5.29		s 10.03		s 6.50	11.40		10.20	4.57
D	4.7 FOWLER	97.8	2.40	**3.35**	5.19		s **9.54**		s 6.41	f **11.29**		**9.54**	4.40
	1.3 STAR (Spur)	96.5							f				
	3.2 WINEDALE	93.3											
D	1.1 SELMA	92.2	2.32	f 3.27	f 5.10		s 9.44		s 6.31	s 11.16		9.30	4.15
DN	4.9 KINGSBURG	87.3	2.25	3.19	**5.01**		s 9.32		s 6.20	s **11.04**		**8.30**	3.42
	1.5 SUMNER (Spur)	85.8											
	4.2 TRAVER	81.6	2.18	3.12	4.53		9.23		f 6.09	10.53		**7.39**	**3.26**
	2.4 CROSS	79.2	2.15	3.09	4.50		9.20		6.05	10.50		7.15	3.10
DN-R	5.4 **GOSHEN JCT.**	73.8	2.08	3.02	s 4.41		9.10 s **9.00**		s 5.55	10.40PM	12.30PM	7.00AM	2.45
	6.5 TAGUS	67.3	2.00	2.54	4.29		8.52		f 5.42		11.59AM		1.50
	4.1 A. T. & S. F. CROSSING	63.2											
DN	0.3 TULARE	62.9	f 1.52	f 2.46	s 4.20		s 8.44		s 5.34		11.35		1.30
	1.5 BURLING (Spur)	61.4											
	4.3 OCTOL	57.1	1.42	2.36	4.08	(Runs via Porterville)	8.33		f **5.19**	(Runs Via Porterville)	10.05		**12.55**
D	4.6 TIPTON	52.5	1.36	2.30	4.01		s **8.27**		s 5.11		**9.42**		12.35
	3.3 QUAIL	49.2							f				
D	3.1 PIXLEY	46.1	1.28	2.22	3.53		s 8.17		s 5.00		**8.47**		12.05PM
D	5.6 EARLIMART	40.5	**1.20**	2.15	3.46		s 8.07		s 4.50		8.25		11.50AM
	3.4 STONE (Spur)	37.1											
	0.7 RADNOR	36.4	1.14	2.09	3.40		**7.58**		f 4.42		**7.58**		11.35
DN	4.2 DELANO	32.2	1.08	2.03	3.34		s 7.52		s 4.35		7.30		11.20
D	6.3 McFARLAND	25.9	1.00	1.55	3.26		s 7.42		s 4.25		7.00		**11.00**
	3.9 HUNT (Spur)	22.0											
DN-R	1.7 **FAMOSO**	20.3	12.53	**1.47**	3.19	s 6.45AM	7.32	s 12.34PM	s 4.15	s 7.48PM	6.25		**10.37**
	3.3 SLATER	17.0	12.49	1.38	3.15	6.40	7.28	**12.29**	f 4.10	7.43	6.00		10.20
	3.7 DOW (Spur)	13.3											
	0.9 LERDO	12.4	**12.43**	1.30	3.07	f 6.33	7.22	12.23	f 4.03	7.37	5.45		10.05
	5.3 SACO	7.1	12.36	1.23	2.59	6.25	7.15	12.16	f 3.55	7.30	5.30		9.45
DN-R	2.8 **OIL JCT.**	4.3	12.32	1.19	2.55	f 6.21	7.11	12.12PM	f 3.51	7.26	5.20		9.30
	2.5 NOME	1.8	12.28	1.15	**2.49**	6.17	7.07		3.47	7.22	5.12		9.15
DN-R	1.8 **BAKERSFIELD**	0.0	12.21AM	**1.08**AM	2.40AM	6.10AM	7.00AM		3.40PM	7.15PM	5.00AM		8.55AM
	(107.4)		Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily Ex. Sunday	Leave Daily Ex. Sunday	Leave Daily
	Time over District		(2.39)	(2.47)	(3.05)	(0.35)	(3.15)	(0.22)	(3.25)	(1.48)	(7.30)	(3.45)	(8.35)
	Average speed per hour		40.52	38.58	34.83	34.80	33.04	43.63	31.48	29.94	9.84	8.96	12.51

Westward trains are superior to trains of the same class in the opposite direction. Exception: No. 212 is superior to No. 213.

Santa Fe schedules originate and terminate at Santa Fe Junction; switch opposite section house at Oil Junction.

ADDITIONAL STOPS—No. 81 will stop at all stations west of Famoso to discharge passengers from stations Los Angeles or east.

BAKERSFIELD AND MOJAVE SUBDIVISION

EASTWARD

Time Table No. 138
February 12, 1922

Capacity of sidings in car lengths and location of Scales, Fuel, Water, Turning and Telephone Stations.					SECOND CLASS								FIRST CLASS							Distance from San Francisco		STATIONS	
					334	**340**	**342**	**306**	**338**	**. 252**			**8**	**22**	**108**	**2**	**50**	**26**	**60**				
					Freight	**Freight**	Local Freight	**Bakersfield Olig Mixed**	**Freight**	**Sunset Manifest Freight**			**SanFrancisco Los Angeles Passenger**	Santa Fe Passenger	Fresno Los Angeles Express	**Santa Fe Tourist Express**	**San Joaquin Valley Passenger**	**The Owl**	The Sacramento				
					Leave Daily	**Leave Daily**	**Leave Daily**	**Leave Daily Ex. Sunday**	**Leave Daily**	**Leave Daily**			**Leave Daily**	**Leave Daily**	**Leave Daily**	**Leave Daily**	**Leave Daily**	**Leave Daily**	**Leave Daily**				
WFTYOP } Yard								8.00AM					11.40PM		11.35AM		3.07AM	**2.27**AM	1.18AM	312.9	Automatic Block Signals	DN-R **BAKERSFIELD** 0.7	
P I					6.25PM	12.50PM	8.00AM	8.05AM	6.05AM	**12.12**AM			11.43	6.15PM	11.38	7.55AM	3.10	2.30	1.21	313.6		DN-R **KERN JCT.** 3.4	Double Track
71 P					6.33	12.58	**8.10**		6.14	12.20			11.49PM	6.20	11.43	8.00	3.15	2.35	1.26	317.0		MAGUNDEN 2.5	
																				319.5		SOLY 0.6	
67 P					6.40	**1.05**	**8.41**		6.20	**12.40**			s **12.01**AM	6.25	11.48	**8.06**	3.20	2.40	1.31	320.1		DN EDISON 4.9	
58 P					6.52	1.17	8.55		6.30	12.52			12.14	6.32	f 11.56AM	8.14	3.28	2.48	**1.39**	325.0		SIVERT 2.9	
67 PW					6.58	1.23	9.05		6.37	12.58			**12.27**	6.38	f 12.01PM	**8.19**	3.33	2.53	1.45	327.9		N BENA 3.4	
64 P					7.10	1.31	9.15		6.45	**1.05**			12.34	6.45	12.07	8.25	3.39	2.59	**1.52**	331.3		ILMON 3.9	
East 69 } PW West 64					**7.33**	2.00	10.00		7.10	**1.44**			s **12.45**	6.54	s **12.17**	s 8.35	3.48	3.07	2.00	335.2		DN CALIENTE 3.0	
64 P					7.47	2.12	10.15		**7.31**	**2.07**			12.54	**7.01**	12.25	8.42	3.55	3.14	**2.07**	338.2		ALLARD 2.3	
West 75 } PW East 58					7.57	**2.27**	10.35		7.41	2.20			1.04	7.07	f 12.32	8.48	4.02	3.20	2.14	340.5		DN BEALVILLE 1.8	
24 P					8.05	2.34	10.45		7.47	2.26			1.12	**7.14**	12.38	8.53	4.07	3.25	2.20	342.3		CLIFF 3.2	
East 62 M20 West 65 P					8.20	2.52	**11.15**		8.05	2.41			**1.20**	7.23	f 12.47	9.02	4.15	3.33	2.28	345.5		DN ROWEN 3.3	
64 PW House 61					8.45	3.17	11.39		8.30	3.05			s 1.41	7.38	s 1.02	9.13	**4.27**	3.48	2.42	348.8		DN WOODFORD 3.0	
64 P					9.00	3.32	11.55AM		8.45	3.20			1.50	7.47	1.11	9.23	4.36	**3.57**	2.51	351.8		WALONG 2.3	
West 70 } PW East 62					9.15	3.42	12.10PM		8.55	3.30			2.00	7.55	f 1.21	9.33	4.44	4.05	2.59	354.1		DN MARCEL 2.6	
64 P					9.30	3.57	12.25		9.10	**3.42**			2.11	8.03	f 1.30	9.43	4.52	4.13	3.07	356.7		CABLE 3.9	
156 PW					9.45	4.10	1.00		9.25	3.55			s 2.25	8.13	s **1.41**	s **9.56**	f 5.03	4.23	3.17	360.6		DNR **TEHACHAPI** 1.8	
108 PY					**10.10**	4.25	**1.33**		**9.45**	**4.26**			2.31	8.19	1.45	10.04	**5.06**	**4.26**	**3.22**	362.4		SUMMIT 2.6	
													f 2.35		f 1.50					365.0		D MONOLITH 2.1	
61 P					**10.29**	**4.35**	**1.55**		9.55	**4.40**			2.39	8.26	**1.55**	10.12	5.13	**4.33**	3.29	367.1		PROCTOR 0.9	
YP																				368.0		ERIC 1.9	(Wye)
131 PW					**10.59**	4.50	2.10		**10.18**	4.50			2.44	8.31	f 2.01	**10.18**	5.18	4.38	3.34	369.9		D CAMERON 2.8	
65 P					11.19	5.05	2.25		10.40	**5.23**			**2.49**	8.36	2.06	10.24	**5.23**	4.43	3.39	372.7		N LAROSE 2.7	
59 P					11.39PM	5.25	2.45		11.00	**5.57**			2.54	8.41	f 2.12	10.30	5.28	4.48	**3.44**	375.4		D WARREN 2.4	
61 P					**12.04**AM	**5.50**	3.05		11.20	6.14			2.59	8.46	2.17	10.36	5.32	4.52	3.49	377.8		FRAM 2.9	
Yard } WFTYOP					12.35AM	6.20PM	3.25PM		11.35AM	· 6.30AM			s **3.05**AM	s **8.55**PM	s 2.25PM	s 10.45AM	s **5.40**AM	s 5.00AM	s 3.57AM	380.7		DN-R **MOJAVE**	
					Arrive Daily	**Arrive Daily**	Arrive Daily	**Arrive Daily Ex. Sunday**	**Arrive Daily**	**Arrive Daily**			**Arrive Daily**	Arrive Daily	**Arrive Daily**	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily			(67.8)	
					(6.10) 10.88	(5.30) 12.20	(7.25) 9.04	(0 05) 8 40	(5.30) 12.20	(6.18) 10.76			(3.25) 19.84	(2.40) 25.16	(2.50) 23.68	(2.50) 23.68	(2.33) 26.58	(2.33) 26.58	(2.39 25.58			..........................Time over District ....Average speed per hour	

Westward trains are superior to trains of the same class in the opposite direction.

ADDITIONAL STOPS

No. 50 will stop on signal at all stations to receive passengers for Yuma or east.

BAKERSFIELD AND MOJAVE SUBDIVISION

WESTWARD

Time Table No. 138

February 12, 1922.

Automatic Block Signals

			FIRST CLASS							THIRD CLASS				
		Distance from Mojave	109 Sunset Express	9 Santa Fe Mail and Express	107 Los Angeles Fresno Express	21 Santa Fe Passenger	25 The Owl	59 The Sacramento	49 San Joaquin Valley Passenger	341 Local Freight	333 Freight	307 Olig Bakersfield Mixed	253 Freight	251 Sunset Manifest Freight
	STATIONS		Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily Ex. Sunday	Arrive Daily	Arrive Daily
DN-R	**BAKERSFIELD** 0.7	67.8	s 5.46AM		s 3.25PM		s 12.15AM	s 12.54AM	s **2.27AM**			s 3.35PM		
DN-R	**KERN JCT.** 3.4 Double track	67.1	5.43	8.15AM	3.22	8.15PM	**12.12**	12.51	2.24	9.10AM	1.25PM	3.30PM	8.50PM	2.05AM
	MAGUNDEN 2.5	63.7	5.38	**8.10**	3.15	8.07	12.06	12.45	2.18	8.55	1.13		8.36	1.57
	SOLY 0.6	61.2												
DN	EDISON 4.9	60.6	s 5.33	**8.06**	s 3.10	8.02	**12.01AM**	**12.40**	2.13	**8.41**	**1.05**		8.20	1.50
	SIVERT 2.9	55.7	5.24	8.00	f 3.00	7.53	11.53PM	12.32	2.05	8.29	12.53		8.05	**1.39**
N	BENA 3.4	52.8	5.19	7.55	f 2.55	7.48	11.48	**12.27**	1.59	**8.19**	12.46		7.58	1.15
	ILMON 3.9	49.4	5.12	7.49	2.48	7.41	11.41	12.20	**1.52**	8.00	12.38		7.50	**1.05**
DN	CALIENTE 3.0	45.5	s 5.03	s 7.40	s 2.40	s **7.33**	11.33	12.11	**1.44**	7.45	**12.17PM**		**7.33**	**12.45**
	ALLARD 2.3	42.5	4.53	**7.31**	2.32	7.26	11.27	12.04AM	1.37	**7.31**	11.49AM		**7.01**	12.29
DN	BEALVILLE 1.8	40.2	4.48	7.26	f **2.27**	7.20	11.22	11.59PM	1.32	7.02	11.41		6.45	12.20AM
	CLIFF 3.2	38.4	4.44	7.22	2.23	**7.14**	11.18	11.55	1.27	6.51	11.25		6.30	11.59PM
DN	ROWEN 3.3	35.2	4.36	7.14	f 2.16	7.07	11.11	**11.48**	**1.20**	6.36	**11.15**		6.19	**11.48**
DN	WOODFORD 3.0	31.9	s **4.27**	7.06	s 2.09	7.00	11.04	11.41	1.13	6.26	11.01		6.05	11.25
	WALONG 2.3	28.9	**3.57**	6.58	2.02	6.54	10.58	11.34	1.07	6.05	10.41		5.45	11.07
DN	MARCEL 2.6	26.6	3.50	6.52	f 1.56	6.48	**10.53**	11.29	1.02	5.50	10.31		5.35	**10.53**
	CABLE 3.9	24.0	**3.42**	6.45	f 1.49	6.42	10.47	11.23	12.56	5.30	10.11		5.15	10.37
DN-R	**TEHACHAPI** 1.8	20.1	s 3.32	s 6.35	s **1.41**	s 6.33	10.39	11.15	f 12.48	5.16	**9.56**		5.00	10.20
	SUMMIT 2.6	18.3	**3.22**	6.30	**1.33**	6.30	10.36	11.12	12.44	**5.06**	**9.45**		4.45	**10.10**
D	MONOLITH 2.1	15.7	f 3.13		f 1.28									
	PROCTOR 0.9	13.6	3.09	6.23	1.23	6.24	**10.29**	11.05	12.38	**4.40** **4.28**	9.35		**4.35**	10.00
	ERIO (Wye) 1.9	12.7												
D	CAMERON 2.8	10.8	f 2.59	6.15	f 1.17	6.17	10.23	**10.59**	12.31	4.15	9.23		4.23	9.48
N	LAROSE 2.7	8.0	**2.49**	6.06	1.07	6.08	10.14	10.50	12.22	4.00	9.13		4.13	9.38
D	WARREN 2.4	5.3	2.39	**5.57**	f 12.58	5.59	10.05	10.41	12.13	**3.44**	9.00		4.00	9.25
	FRAM 2.9	2.9	2.30	5.48	f 12.49	**5.50**	9.56	10.32	**12.04AM**	3.25	8.45		3.45	9.10
DN-R	**MOJAVE**	0.0	2.22AM	**5.40AM**	12.40PM	5.40PM	9.48PM	10.24PM	11.56PM	**3.05AM**	8.30AM		3.30PM	**8.55PM**
	(67.8)		Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily Ex. Sunday	Leave Daily	Leave Daily
	Time over District		(3.24)	(2.35)	(2.45)	(2.35)	(2.27)	(2.30)	(2.31)	(6.05)	(4.55)	(0.05)	(5.20)	(5.10)
	Average speed per hour		19.94	25.97	24.65	25.97	27.67	27.12	26.94	10.80	13.78	8.40	12.71	13.12

Westward trains are superior to trains of the same class in the opposite direction.

MOJAVE AND SAUGUS SUBDIVISION

EASTWARD — WESTWARD

Capacity of sidings in car lengths and location of Scales, Fuel, Water, Turning and Telephone Stations.	EASTWARD THIRD CLASS		EASTWARD FIRST CLASS					Distance from San Francisco	Time Table No. 138 February 12, 1922.	Distance from Saugus	WESTWARD FIRST CLASS					WESTWARD THIRD CLASS	
	252 Sunset Manifest Freight	**264** Local Freight	**108** Fresno Los Angeles Express	**50** San Joaquin Valley Passenger	**26** The Owl	**60** The Sacramento	**8** San Francisco Los Angeles Passenger		**STATIONS**		**107** Los Angeles Fresno Express	**25** The Owl	**59** The Sacramento	**49** San Joaquin Valley Passenger	**109** Sunset Express	**263** Local Freight	**251** Sunset Manifest Freight
	Leave Daily	Leave Tues., Thurs., Sat.	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily				Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Mon., Wed., Fri.	Arrive Daily
Yard WFTOPY	8.20AM	3.25AM	2.30PM	5.50AM	5.10AM	4.07AM	3.20AM	380.7	DN-R **MOJAVE**	69.9	s 12.30PM	s 9.40PM	s 10.16PM	s 11.46PM	s 2.07AM	10.45AM	7.20PM
			f					384.8	4.1 FLETA	65.8	f						
65	8.50	3.50	f 2.41	6.00	5.20	4.18	3.30	387.3	2.5 GLOSTER	63.3	f 12.15	9.28	10.04	11.34	1.54	10.20	6.55
65 P	9.10	4.10	s 2.53	6.11	5.31	4.30	f 3.41	394.3	7.0 D ROSAMOND	56.3	s 12.03PM	9.16	9.52	11.22	f 1.42	9.55	6.25
64 W	**9.30**	**4.40**	f 3.03	6.20	5.40	**4.40**	3.50	399.9	5.6 OBAN	50.7	f 11.53AM	9.07	9.43	11.13	1.32	**9.30**	6.00
66 W	10.00	5.10	s 3.15	s 6.32	5.49	4.50	s 4.04	405.5	5.6 DN-R LANCASTER	45.1	s 11.44	8.58	9.34	f 11.04	s 1.23	9.05	5.40
64	10.15	5.30	f 3.24	6.40	5.57	4.58	4.12	409.8	4.3 DENIS	40.8	f 11.34	8.51	9.27	10.56	1.11	8.10	5.23
58 WFY	10.55	**6.04**	s 3.34	6.48	**6.04**	5.06	s 4.22	413.8	4.0 DN-R PALMDALE	36.8	s 11.27	8.45	9.21	f 10.50	s 1.05	7.55	5.13
64	**11.18**	6.25	f 3.41	6.55	6.10	5.13	4.28	416.3	2.5 HAROLD	34.3	f **11.18**	8.39	9.15	10.43	12.56	7.37	5.00
64 PY	11.55AM	**7.08**	f 3.54	**7.08**	6.23	5.28	4.43	420.5	4.2 DN VINCENT	30.1	f 11.09	8.30	9.06	10.34	12.47	**7.08**	4.35
64	12.30PM	7.40	**4.04**	7.18	**6.33**	5.38	4.54	425.0	4.5 PARIS	25.6	10.55	8.14	8.50	10.18	12.31	**6.33**	**4.04**
	12.40	7.50	s 4.08	7.21	6.36	5.41	f 4.58	426.1	1.1 D ACTON	24.5	s 10.51	8.11	8.46	10.14	f 12.27	6.22	3.45
79 WP	1.20	8.10	s 4.15	7.28	6.43	**5.48**	s 5.07	429.0	2.9 DN RAVENNA	21.6	s 10.43	8.04	8.38	10.05	f 12.18	**5.48**	3.35
63	1.50	8.35	f 4.28	7.41	6.56	6.01	**5.23**	434.6	5.6 RUSS	16.0	f 10.29	7.51	8.23	9.48	12.04AM	**5.23**	2.56
67 W	**2.35**	9.10	s 4.40	7.52	7.07	6.12	f 5.36	438.8	4.2 DN LANG	11.8	s 10.17	7.40	8.12	9.36	f 11.52PM	4.40	**2.35**
63	2.50	9.30	f 4.52	8.04	7.19	6.24	f 5.49	443.1	4.3 HUMPHREYS	7.5	f 10.03	7.26	7.58	9.21	f 11.37	4.15	2.12
64	3.05	**9.54**	f 5.04	8.15	7.30	6.35	f 6.00	446.9	3.8 HONBY	3.7	f **9.54**	7.18	7.49	9.13	11.28	4.00	1.56
87 WFY	3.20PM	10.15AM	s 5.15PM	s 8.25AM	7.40AM	6.45AM	s 6.10AM	450.6	3.7 DN-R **SAUGUS**	0.0	9.45AM	7.10PM	7.40PM	9.05PM	11.20PM	3.45AM	1.40PM
	Arrive Daily	Arrive Tues., Thurs., Sat.	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily		(69.9)		Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Mon., Wed., Fri.	Leave Daily
	(7.00) 9.98	(6.50) 10.22	(2.45) 25.41	(2.35) 27.05	(2.30) 27.96	(2.38) 26.54	(2.50) 24.67		……Time over District…… ……Average speed per hour……		(2.45) 25.41	(2.30) 27.96	(2.36) 26.88	(2.41) 26.04	(2.47) 25.12	(7.00) 9.98	(5.40) 12.33

Automatic Block Signals

Westward trains are superior to trains of the same class in the opposite direction.

ADDITIONAL STOPS

No. 50 will stop on signal at all stations to receive passengers for Yuma or east.
No. 26 will stop at Saugus to discharge passengers from San Francisco.
No. 60 will stop at Saugus to discharge passengers from Sacramento or beyond.

EASTWARD

FRESNO AND BAKERSFIELD SUBDIVISION

WESTWARD

Time Table No. 138

February 12, 1922.

Capacity of sidings in car lengths, and location of Scales, Fuel, Water, Turning and Telephone Stations.	THIRD CLASS		FIRST CLASS						Distance from San Francisco			Distance from Famoso	FIRST CLASS					THIRD CLASS	
	246	238	88	90	10	96	108	50					109	5	89	97	87	239	245
	Kerman Porterville Mixed	Fresno Porterville Local Freight	Coalinga Porterville Passenger	Fresno Bakersfield Passenger	Santa Fe Passenger	Coalinga Porterville Passenger	Fresno Los Angeles Express	San Joaquin Valley Passenger			STATIONS		Sunset Express	Santa Fe Passenger	Porterville Fresno Passenger	Porterville Coalinga Passenger	Oil Fields Passenger	Porterville Fresno Local Freight	Porterville Kerman Mixed
	Leave Daily Ex. Sunday	Leave Daily Ex. Sunday	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily					Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily Ex. Sunday	Arrive Daily Ex. Sunday
WFTOP YARD		2.30AM		6.35PM			7.00AM		205.5	DN-R	**FRESNO** 1.5	104.3	s 10.45AM		s 4.20PM			2.00PM	
I									207.0		A. T. & S. F. Crossing 1.5	102.8							
8		2.50		6.46			f 7.11		208.5		BLOSSOMA 2.1	101.3	f 10.31		f 4.06			1.35	
							f		210.6		ESHEL (Spur) 1.2	99.2			f				
24 24		3.00		6.51			f 7.17		211.8		BUTLER 1.2	98.0	f 10.25		f 4.00			1.15	
Y							f		213.0		LOCANS (Spur) 1.5	96.8	f		f				
26		3.10		6.55			f 7.22		214.5		IVESTA 1.4	95.3	f 10.20		f 3.55			1.00	
87W		3.15		f 6.58			f 7.25		215.9		CLOTHO 3.9	93.9	f 10.16		f 3.52			12.50	
86 26W		3.40		s 7.07			s 7.34		219.8	D	SANGER 3.0	90.0	s 10.08		s 3.45			12.30PM	
17		3.50		f 7.12			f 7.39		222.8		TARN 2.5	87.0	f 10.00		f 3.37			11.45AM	
26P		3.55		f 7.17			f 7.44		225.3		FARGO 2.6	84.5	f 9.55		f 3.32			11.35	
8		4.05		f 7.22			f 7.49		227.9		LACJAC 0.1	81.9	f 9.51		f 3.28			11.25	
									228.0		A. T. & S. F. Crossing 1.9	81.8							
55		4.20		s 7.30			s 7.57		229.9	D	REEDLEY 5.1	79.9	s 9.46		s 3.23			11.15	
63W		4.40		s 7.41			s 8.08		235.0	D	DINUBA 2.2	74.8	s 9.35		s 3.12			10.30	
9P				f			f		237.2		SMYRNA 2.4	72.6	f		f				
P		4.55		f 7.50			f 8.17		239.6		MONSON 4.0	70.2	f 9.26		s 3.03			9.50	
									243.6		A. T. & S. F. Crossing 2.8	66.2							
27		5.20		8.03			f 8.30		246.4		TAURUSA 2.9	63.4	f **9.12**		f 2.50			**9.12**	
				f 8.08			f 8.35		249.3		VENICE HILL (Spur) 0.4	60.5	f 9.07		f 2.45				
24P		5.35							249.7		KLINK 2.5	60.1						8.50	
19P		5.45		f 8.14			f 8.41		252.2		ROCHE 0.9	57.6	f 9.02		f 2.39				
27 27		5.50		8.16			f **8.43**		253.1		CAPLIN 4.3	56.7	f 9.00		f 2.37			**8.43**	
84WYO	12.55PM	6.30	9.10PM	s 8.25		10.07AM	s **8.50** 8.55	12.48AM	257.4	DN-R	**EXETER** 3.1	52.4	**8.50** s 8.45		s 2.29	s 7.15PM	s 9.40PM	8.15	s 8.20AM
18	1.02		9.15	f 8.30		f 10.15	f 9.02	12.53	260.5		BURR 3.8	49.3	8.36		2.20	f 7.07	9.32		
136	s 1.33	**7.30**	s **9.25**	s 8.40		s 10.23	s 9.10	s 1.01	264.3	D	LINDSAY 4.3	45.5	s 8.30		s 2.14	s 7.00	s **9.25**	**7.30**	s 8.00
45	f 1.45	**7.50**	s 9.34	f 8.48		s 10.31	s 9.18	1.08	268.6	D	STRATHMORE 2.3	41.2	s 8.19		s 2.04	s 6.50	f 9.15	6.35	**7.50**
18 6	f **1.58**	**8.13**	f 9.39	f 8.52		f 10.36	f 9.22	1.12	270.9		ZANTE 1.3	38.9	**8.13**		**1.58**	f 6.44	9.09		
			f						272.2		LISKO (Spur) 1.5	37.6				f			
			f						273.7		KURTH (Spur) 0.7	36.1				f			
22	s 2.08	9.00	s 9.50	s **9.02**		s 10.45	s 9.32	s 1.21	274.4		**PORTERVILLE** 0.4	35.4	s 8.05.		s 1.50	s 6.35	s **9.02**	6.05	s 7.35
52WY	2.13PM	9.05AM	s 9.55PM	9.07		s 10.50AM	9.36	1.25	274.8	DN-R	PORTERVILLE-OLIVE ST. 1.7	35.0	7.58		1.45PM	6.30PM	8.57	6.00AM	7.30AM
22				9.11			f 9.40	1.28	276.5		PONOA 1.5	33.3	7.54				8.52		
35				f 9.14			f 9.43	1.31	278.0		LOIS 4.6	31.8	f 7.49				8.49		
50 27				s 9.23			s 9.52	1.38	282.6	D	TERRA BELLA 4.5	27.2	s 7.40				f 8.42		
77				s 9.32	4.36PM		s 10.01	1.45	287.1	DN-R	**DUCOR** 2.9	22.7	s 7.30	s **1.10PM**			f 8.32		
26 26				f 9.38	4.41		f 10.08	1.50	290.0		ORRIS 1.5	19.8	f 7.23	1.05			8.24		
				f	f				291.5		VESTAL (Spur) 3.4	18.3	f	f					
13				f 9.46	f 4.48		f 10.17	1.58	294.9		RICHGROVE 4.1	14.9	f 7.14	f 12.58			f 8.16		
23				f 9.52	4.54		f 10.24	2.04	299.0		JASMIN 10.8	10.8	f 7.07	12.52			f 8.09		
90TW				s 10.10PM	s 5.10PM		s 10.41AM	2.20AM	309.8	DN-R	**FAMOSO** (104.3)	0.0	6.50AM	12.36PM			7.51PM		
	Arrive Daily Ex. Sunday	Arrive Daily Ex. Sunday	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily					Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily Ex. Sunday	Leave Daily Ex. Sunday
	(1.18) 13.38	(6.35) 15.84	(0.45) 23.20	(3.35) 29.10	(0.34) 40.05	(0.43) 24.27	(3.41) 28.31	(1.32) 34.10			……Time over District…… ……Average speed per hour……		(3.55) 26.63	(0.34) 40.05	(2.35) 26.82	(0.45) 23.20	(1.49) 29.76	(8.00) 8.66	(0.50) 20.08

ADDITIONAL STATIONS:

BALL (Spur)	207.1	REKA	221.0	SAMUELS (Spur)	229.1	MUSK	255.1	STOUT (Spur)	265.8
MARS	207.9	UVA	227.1	DORSEY	250.8	VANCE	262.8	BONAR (Spur)	275.5
GOLDLEAF	209.9	EFCO	227.6	LORT (Spur)	254.0	WORTHING	265.5		

Westward trains are superior to trains of same class in opposite direction. Exception: No. 88 is superior to No. 97.

ADDITIONAL STOPS: No. 50 will stop at all stations to receive passengers for Yuma or East.

FRESNO AND BAKERSFIELD SUBDIVISION

EASTWARD

Time Table No. 138

February 12, 1922.

Capacity of sidings in car lengths and location of Scales, Fuel, Water, Turning and Telephone Stations	THIRD CLASS			FIRST CLASS										Distance from San Francisco		STATIONS
	324	246	250	514	512	88	510	508	312	96	504	92	50			
	Mixed	Kerman Porterville Mixed	Coalinga Goshen Jct. Local Freight	Visalia Electric Passenger	Visalia Electric Passenger	Coalinga Porterville Passenger	Visalia Electric Passenger	Visalia Electric Passenger	Alcalde Coalinga Passenger	Coalinga Porterville Passenger	Visalia Electric Passenger	Fresno Visalia Passenger	San Joaquin Valley Passenger			
	Leave Daily Ex. Sunday	Leave Daily Ex. Sunday	Leave Daily Ex. Sunday	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Wed. Only	Leave Daily	Leave Daily	Leave Daily	Leave Daily			
28 T									12.10PM					273.3	R	**ALCALDE** 1.2
														272.1		LE ROY 2.2
														269.9		CRUMP (Spur) 1.5
79 YP			5.00AM			6.00PM			s 12.35PM	7.05AM				268.4	D-R	**COALINGA** 1.7
FP			5.10			f 6.03				f 7.10				266.7		ORA 6.7
P			5.30			f 6.15				f 7.22				260.0		TURK 7.3
49			6.00			s 6.28				s 7.35				252.7		HURON 6.6
58			6.25			s 6.40				s 7.45				246.1	D	WESTHAVEN 6.7
P			6.50			f 6.52				f 7.57				239.4		LETHENT 2.9
75 YP	1.31PM		7.05			f 6.57				f 8.03				236.5	R	**ROSSI** 1.1
						f				f				235.4		HEINLEN (Spur) 1.5
66 O	f 1.40		8.09			s 7.05				s 8.09				233.9	D	LEMOORE 2.7
						f				f				231.2		ORION (Spur) 2.1
East 39 West 47 WYP	s 1.55PM	10.35AM	8.30 10.00			s 7.17				s 8.20				229.1	D-R	**ARMONA** 3.1
I														232.2		A. T. & S. F. CROSSING 0.3
65		s 10.50	10.15 11.20			s 7.35				s 8.30				232.5	D	HANFORD 5.1
64		11.05	11.55AM			f 7.43				f 8.38				237.6		REMNOY 7.7
102 WFY		s 11.30AM	1.00PM			s 8.00 8.27				s 8.50 9.20		8.00AM	12.03AM	245.3	DN-R	**GOSHEN JCT.** 3.7
										f				249.0		FAXON (No Siding) 1.5
														250.5		JACOBS (Spur) 2.1
21														252.6		WEST VISALIA 0.5
38		s 12.05PM		9.15PM	6.05PM	s 8.47	3.10PM	2.00PM		s 9.40	8.20AM	s 8.20AM	s 12.23	253.1	D-R	**VISALIA** 0.1
														253.2		A. T. & S. F. CROSSING 2.0
P		12.15		f 9.23	f 6.13	8.54	f 3.18	f 2.08		9.47	f 8.28		12.30	255.2		AMBLER (Spur) 2.1
														257.3		RECTOR 1.7
13 P		f 12.25		s 9.29	s 6.19	f 8.59	s 3.24	s 2.14		f 9.53	s 8.34		12.36	259.0		FARMERSVILLE 1.2
P		12.28		f 9.32	f 6.22	9.02	f 3.27	f 2.17		9.56	f 8.37		12.39	260.2		GIANT OAK 0.9
		12.30		f 9.34	f 6.24		f 3.29	f 2.19		9.58	f 8.39			261.1		LUNA 2.1
84 YWO		s 12.40PM		s 9.40PM	s 6.30PM	s 9.09PM	s 3.35PM	s 2.25PM		s 10.05AM	s 8.45AM		s 12.46AM	263.2	DN-R	**EXETER**
	Arrive Daily Ex. Sunday	Arrive Daily Ex. Sunday	Arrive Daily Ex. Sunday	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Wed. Only	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily			(78.3)
	(0.24) 18.50	(2.05) 16 30	(8.00) 6.93	(0.25) 24.24	(0.25) 24.24	(3.09) 23.30	(0 25) 24.24	(0.25) 24.24	(0.25) 11.75	(3.00) 24.46	(0.25) 24.24	(0.20) 23.40	(0.43) 24.97			................Time over District ....Average speed per hour

Westward trains are superior to trains of the same class in the opposite direction. Exception: No. 96 and No. 92 are superior to No. 85; No. 88 is superior to No. 97; No. 508 is superior to No. 509.

Visalia Electric Schedules originate and terminate at the east end of jail track at Visalia Passenger Station and their time at Visalia must be considered as applying at that point.

Additional Stops: No. 50 will stop at all stations to receive passengers for Yuma or East.

FRESNO AND BAKERSFIELD SUBDIVISION

WESTWARD

Time Table No. 138

February 12, 1922.

			FIRST CLASS									THIRD CLASS		
		Distance from Exeter	503	85	311	507	509	511	97	513	87	249	245	323
			Visalia Electric Passenger	Visalia Coalinga Passenger	Coalinga Alcalde Passenger	Visalia Electric Passenger	Visalia Electric Passenger	Visalia Electric Passenger	Porterville Coalinga Passenger	Visalia Electric Passenger	Oil Fields Passenger	Goshen Jct. Coalinga Local Freight	Porterville Kerman Mixed	Mixed
	STATIONS		Arrive Daily	Arrive Daily	Arrive Wed. Only	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily Ex. Sunday	Arrive Daily Ex. Sunday	Arrive Daily Ex. Sunday
R	**ALCALDE**	78.3			s 12.05PM									
	1.2													
	LE ROY	77.1												
	2.2													
	CRUMP (Spur)	74.9												
	1.5													
D-R	**COALINGA**	73.4		s 11.30AM	11.40AM				s 10.15PM			1.00PM		
	1.7													
	ORA	71.7		f 11.23					f 10.10			12.45		
	6.7													
	TURK	65.0		f 11.05					f 10.00			12.15PM		
	7.3													
	HURON	57.7		s 10.50					s 9.48			11.45AM		
	6.6													
D	WESTHAVEN	51.1		s 10.36					s 9.37			11.15		
	6.7													
	LETHENT	44.4		f 10.23					f 9.27			10.40		
	2.9													
R	**ROSSI**	41.5		f **10.18**					s 9.21			**10.18**		s **11.44AM**
	1.1													
	HEINLEN (Spur)	40.4		f 10.15					f 9.18			10.05		
	1.5													
D	LEMOORE	38.9		s 10.11					s 9.15			10.00		f 11.35
	2.7													
	ORION (Spur)	36.2		f					f					
	2.1													
D-R	**ARMONA**	34.1		s **10.00**					s 9.05			8.30 7.15	s 11.05AM	11.15AM
	3.1													
	A. T. & S. F. CROSSING	31.0												
	0.3													
D	HANFORD	30.7		s 9.50					s 8.55			7.00	s 10.50	
	5.1													
	REMNOY	25.6		f 9.35					f 8.45			5.30	f 10.30	
	7.7													
DN-R	**GOSHEN JCT.**	17.9		9.20 s **8.50**					8.30 s **8.00**		s 10.35PM	5.00AM	s 10.10	
	3.7													
	FAXON (No siding)	14.2												
	1.5													
	JACOBS (Spur)	12.7												
	2.1													
	WEST VISALIA	10.6												
	0.5													
D-R	**VISALIA**	10.1	s 8.15AM	8.25AM		s 1.05PM	s 2.55PM	s 6.00PM	s 7.40	s 8.00PM	s 10.15		s **9.40**	
	0.1													
	A. T. & S. F. CROSSING	10.0												
	2.0													
	AMBLER (Spur)	8.0	f 8.07			f 12.57	f 2.47	f 5.52	7.32	f 7.52	10.01		9.18	
	2.1													
	RECTOR	5.9												
	1.7													
D	FARMERSVILLE	4.2	s 8.01			s 12.51	s 2.41	s 5.46	s 7.26	s 7.46	9.54		f 9.08	
	1.2													
	GIANT OAK	3.0	f 7.58			f 12.48	f 2.38	f 5.43	f 7.23	f 7.43	9.51		9.05	
	0.9													
	LUNA	2.1	f 7.56			f 12.46	f 2.36	f 5.41		f 7.41	9.49			
	2.1													
DN-R	**EXETER**	0.0	7.50AM			**12.40PM**	2.30PM	5.35PM	7.16PM	7.35PM	9.43PM		8.55AM	
	(78.3)		Leave Daily	Leave Daily	Leave Wed. Only	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily Ex. Sunday	Leave Daily Ex. Sunday	Leave Daily Ex. Sunday
	Time over District		(0.25)	(3.05)	(0.25)	(0.25)	(0.25)	(0 25)	(2.59)	(0.25)	(0.52)	(8.00)	(2.10)	(0.29)
	Average speed per hour		24.24	20.53	11.75	24.24	24.24	24.24	24.60	24.24	20.65	6 93	15.73	15.31

Westward trains are superior to trains of the same class in the opposite direction. Exceptions: No. 96 and No. 92 are superior to No. 85; No. 88 is superior to No. 97; No. 508 is superior to No. 509.

Visalia Electric Schedules originate and terminate at the east end of jail track at Visalia passenger station, and their time at Visalia must be considered as applying at that point.

	EASTWARD						WESTWARD	
Capacity of sidings in car lengths and location of Scales, Fuel, Water, Turning and Telephone Stations.	THIRD CLASS	FIRST CLASS	Distance from San Francisco		Time Table No. 138 February 12, 1922.	Distance from Hardwick	FIRST CLASS	THIRD CLASS
	150 Ingle Armona Mixed	154 Fresno Ingle Armona Passenger					153 Armona Ingle Fresno Passenger	151 Armona Ingle Mixed
	Leave Daily Ex. Sunday	Leave Daily			STATIONS		Arrive Daily	Arrive Daily Ex. Sunday
Y	7.45AM	6.21AM	181.9	R	**INGLE**	42.8	s 12.04PM	s 3.05PM
					5.3			
48	s 8.10	s 6.32	187.2	D	TRANQUILITY	37.0	s 11.50AM	s 2.40
					4.5			
45	s 8.35	s 6.41	191.7	D	SAN JOAQUIN	32.5	s 11.40	s 2.21
					3.2			
16	f 8.45	f 6.48	194.9		CALDWELL	29.3	f 11.32	f 2.11
					3.8			
			198.7		NARES (Spur)	25.5		
					0.3			
35	f 9.05	f 6.57	199.0	D	HELM	25.2	f 11.22	f 1.59
					7.2			
18 29	s 9.25	s 7.12	206.2		BURREL	18.0	s 11.07	s 1.37
					3.2			
8	f 9.33	f 7.18	209.4		BENDER	14.8	f 11.01	f 1.27
					5.2			
15	s 9.45	s 7.31	214.6	D	RIVERDALE	9.6	s 10.49	s 1.12
					2.6			
	f 9.53	f 7.38	217.2		ROBINSON (Spur)	7.0	f 10.41	f 12.35
					2.0			
	f 9.59	f 7.43	219.2		HUB (Spur)	5.0	f 10.36	f 12.25
					1.8			
			221.0		LATON & WESTERN RY. CROSSING	3.2		
					0.8			
	f 10.07	f 7.52	221.8		LYNN (Spur)	2.4	f 10.28	f 12.15
					1.7			
			223.5		HASSET (Spur)	0.7		
					0.7			
53 20	s 10.15AM	s 8.01AM	224.2	D-R	**HARDWICK**	0.0	10.20AM	12.05PM
	Arrive Daily Ex. Sunday	Arrive Daily			(42.3)		Leave Daily	Leave Daily Ex. Sunday
	(2.30)	(1.40)			Time over District		(1.44)	(3.00)
	16.92	25.38			Average speed per hour		24.40	14.10

Westward trains are superior to trains of the same class in opposite direction.
Exception: No. 150 is superior to No. 151.

	EASTWARD							WESTWARD		
Capacity of sidings in car lengths and location of Scales, Fuel, Water, Turning and Telephone Stations.	THIRD CLASS		FIRST CLASS	Distance from San Francisco		Time Table No. 138 February 12, 1922.	Distance from Armona	FIRST CLASS	THIRD CLASS	
	246 Kerman Porterville Mixed	150 Ingle Armona Mixed	154 Fresno Ingle Armona Passenger					153 Armona Ingle Fresno Passenger	151 Armona Ingle Mixed	245 Porterville Kerman Mixed
	Leave Daily Ex. Sunday	Leave Daily Ex. Sunday	Leave Daily			STATIONS		Arrive Daily	Arrive Daily Ex. Sunday	Arrive Daily Ex. Sunday
73 WYP	8.00AM			193.0	DN-R	**KERMAN**	36.1			s 4.10PM
						6.7				
69	f 8.20			199.7		MCMULLIN	29.4			f 3.50
						5.4				
48	f 8.40			205.1	D	RAISIN CITY	24.0			f 3.35
						5.6				
58	f 9.00			210.7	D	CARUTHERS	18.4			f 3.20
						6.1				
48 W	f 9.25			216.8		CANDO	12.3			f 3.00
						3.5				
				220.3		LATON & WESTERN RY. CROSSING	8.8			
						0.3				
49	f 9.35			220.6		LILLIS	8.5			f 2.50
						2.4				
53 20	s 9.45	10.30AM	8.02AM	223.0	D-R	**HARDWICK**	6.1	s 10.19AM	s 11.55AM	f 2.40
						2.3				
	f 9.51	f 10.40	f 8.07	225.3		KIMBLE	3.8	f 10.14	f 11.45	f 2.25
						3.8				
47 WYP	s 9.59AM	s 10.50AM	s 8.15AM	229.1	D-R	**ARMONA**	0.0	10.05AM	11.35AM	2.15PM
	Arrive Daily Ex. Sunday	Arrive Daily Ex. Sunday	Arrive Daily			(36.1)		Leave Daily	Leave Daily Ex. Sunday	Leave Daily Ex. Sunday
	(1.59)	(0.20)	(0.13)			Time over District		(0.14)	(0.20)	(1.55)
	18.20	18.30	28.15			Average speed per hour		26.14	18.30	18.83

Westward trains are superior to trains of the same class in opposite direction.
Exception: No. 246 and No. 150 are superior to No. 151 and No. 245.

	EASTWARD							WESTWARD		
Capacity of sidings in car lengths and location of Scales, Fuel, Water, Turning and Telephone Stations.	THIRD CLASS	FIRST CLASS		Distance from San Francisco		Time Table No. 138 February 12, 1922.	Distance from Friant	FIRST CLASS		THIRD CLASS
	320 Local Freight	148 Fresno Friant Passenger	146 Fresno Friant Passenger					147 Friant Fresno Passenger	149 Friant Fresno Passenger	321 Local Freight
	Leave Daily Ex. Sunday	Leave Daily	Leave Daily			STATIONS		Arrive Daily	Arrive Daily	Arrive Daily Ex. Sunday
YardWFTOPY	6.30AM	4.25PM	8.00AM	205.5	DN-R	**FRESNO**	24.4	s 10.15AM	s 6.40PM	12.30PM
						1.6				
I				207.1		A. T. & S. F. CROSSING	22.8			
						0.9				
				208.0		EAST FRESNO	21.9			
						1.4				
	6.50	f 4.40	f 8.15	209.4		BARTON (Spur)	20.5	f 10.00	f 6.28	12.05PM
						2.2				
				211.6		GRANZ (Spur)	18.3			
						0.2				
47	7.00	f 4.45	f 8.20	211.8		MALTERMORO (Spur)	18.1	f 9.55	f 6.23	11.55AM
						0.3				
				212.1		NAVIN	17.8			
						0.8				
20 12	7.05	f 4.48	f 8.23	212.9		LAS PALMAS	17.0	f 9.52	f 6.20	11.45
						0.3				
				213.2		FRESNO INTERURBAN RY. CROSSING	16.7			
						0.4				
130	7.11	f 4.51	f 8.25	213.6		EGGERS (Spur)	16.3	f 9.50	f 6.18	11.40
						0.3				
18				213.9		VANRIS	16.0			
						1.0				
37	7.17	f 4.54	f 8.28	214.9		TARPEY	15.0	f 9.47	f 6.15	11.30
						1.2				
12 24	7.23	f 4.57	f 8.31	216.1		MELVIN	13.8	f 9.44	f 6.12	11.20
						1.3				
16 W	7.40	s 5.00	s 8.34	217.4	D	CLOVIS	12.5	s 9.41	s 6.09	11.12
						1.1				
12	7.48	f 5.03	f 8.37	218.5		GLORIETTA	11.4	f 9.38	f 6.06	10.45
						2.4				
8				220.9		SETOH	9.0			
						2.0				
25	8.06	f 5.12	f 8.46	222.9		GORDON	7.0	f 9.29	f 5.57	10.25
						0.7				
5	8.15	s 5.16	s 8.50	223.6		EL PRADO	6.3	s 9.27	s 5.55	10.20
						1.2				
		f	f	224.8		BURKHEAD	5.1	f	f	
						5.1				
23 37 T	8.45AM	s 5.30PM	s 9.05AM	229.9	D-R	**FRIANT**	0.0	9.10AM	5.35PM	9.45AM
	Arrive Daily Ex. Sunday	Arrive Daily	Arrive Daily			(24.4)		Leave Daily	Leave Daily	Leave Daily Ex. Sunday
	(2.15)	(1.05)	(1.05)			Time over District		(1.05)	(1.05)	(2.45)
	10.84	22.36	22.36			Average speed per hour		22.36	22.36	8.87

Westward trains are superior to trains of the same class in opposite direction.
Exception: No. 146 is superior to No. 147; No. 148 to No. 149; and No. 320 to No. 321.

	EASTWARD							WESTWARD		
Capacity of sidings in car lengths and location of Scales, Fuel, Water, Turning and Telephone Stations	THIRD CLASS			Distance from San Francisco		Time Table No. 138 February 12, 1922.	Distance from Stratford	THIRD CLASS		
			324 Mixed					323 Mixed		
			Leave Daily Ex. Sunday			STATIONS		Arrive Daily Ex. Sunday		
Y			12.50PM	244.1	DR	**STRATFORD**	0.0	s 12.20PM		
						2.5				
61			f 1.05	241.6		MARSALA	2.5	f 12.10		
						1.7				
48			f 1.15	239.9		CUNEO	4.2	f 12.01PM		
						3.4				
75Y			s 1.30PM	236.5	R	**ROSSI**	7.6	11.45AM		
			Arrive Daily Ex. Sunday			(7.6)		Leave Daily Ex. Sunday		
			(0.40)			Time over District		(0.35)		
			11.40			Average speed per hour		13.03		

Westward trains are superior to trains of the same class in opposite direction.

EASTWARD							Time Table No. 138 February 12, 1922.		WESTWARD			
Capacity of sidings in car lengths and location of Scales, Fuel, Water and Turning and Telephone Stations.	SECOND CLASS		FIRST CLASS		Distance from San Francisco			Distance from Olig	FIRST CLASS		THIRD CLASS	
	306 Bakersfield Olig Mixed	260 Freight		52 Passenger					51 Passenger		259 Freight	307 Olig Bakersfield Mixed
	Leave Daily Ex. Sunday	Leave Daily Ex. Sunday		Leave Daily			STATIONS		Arrive Daily		Arrive Daily Ex. Sunday	Arrive Daily Ex. Sunday
I	8.05AM	4.50AM		9.38AM	313.6	DN-R	**KERN JCT.** 0.5	49.1	4.50PM		12.30PM	3.30PM
					314.1		PARSONS 1.0	48.6				
					315.1		PAC. SMELTING 0.2	47.6				
					315.3		BAKERSFIELD CORRALS 1.4	47.4				
				.	316.7		STRADER (Spur) 2.1	46.0				
52 P	f 8.20	5.10		f 9.50	318.8		WIBLE ORCHARD 1.7	43.9	f 4.37		12.10PM	f 3.15
					320.5		VENOLA (Spur) 2.1	42.2				
63 PY	s 8.35	5.25AM		s 9.58AM	322.6	D-R	**GOSFORD** 5.8	40.1	4.30PM		11.55AM	s 3.00
54 WP	f 8.50				328.4		STEVENS 2.3	34.3				f 2.35
	f				330.7		STRAND (Spur) 1.2	32.0				f
					331.9		MARCO 3.2	30.8				
	f 9.10				335.1		RIO BRAVO 7.7	27.6				f 2.15
	f 9.30				342.8		BOWERBANK 2.6	19.9				f 1.55
	f				345.4		KILOWATT 0.9	17.3				f
101 P	s 9.45				346.3	D	BUTTONWILLOW 2.5	16.4				s 1.45
					348.8		USHER (Spur) 1.7	13.9				
73 WP	f 9.55				350.5		LOKERN 8.9	12.2				f 1.15
	10.25				359.4		ASPHALTO 1.2	8.3				12.35
36 PY	s 10.50				360.6	D-R	**McKITTRICK** 2.1	2.1				s 12.30PM
	s 11.05AM				362.7	R	**OLIG**	0.0				11.20AM
	Arrive Daily Ex. Sunday	Arrive Daily Ex. Sunday		Arrive Daily			(49.1)		Leave Daily		Leave Daily Ex. Sunday	Leave Daily Ex. Sunday
	(3.00) 16.37	(0.35) 15.43		(0.20) 27.00			Time over District Average speed per hour		(0.20) 27.00		(0.35) 15.43	(4.10) 11.7

Westward trains are superior to trains of the same class in the opposite direction.

EASTWARD				Time Table No. 138 February 12, 1922.		WESTWARD	
Capacity of sidings in car lengths and location of Scales, Fuel, Water and Turning and Telephone Stations.			Distance from San Francisco	STATIONS	Distance from Ainrof		
Y			308.6	**OIL JCT.** 0.3	5.7		
			308.9	STORAGE TRACKS 1.1	5.4		
			310.0	BOAZ 0.5	4.3		
34			310.5 D	WAITS 0.6	3.8		
			311.1	SEGURO 0.5	3.2		
			311.6	MALTHA 0.4	2.7		
			312.0	VOLCAN 0.2	2.3		
			312.2	LA SOLAS 0.2	2.1		
			312.4	OMENA 0.3	1.9		
			312.7	ADIOS (Spur) 0.1	1.6		
			312.8	CESARO (Spur) 0.2	1.5		
			313.0	**TREADWELL JCT.** 0.1	1.3		
			313.1	EBIGMO (Spur) 0.3	1.2		
			313.4	PENTOL 0.3	0.9		
29 Y			313.7	OIL CITY 0.6	0.6		
			314.3 R	**AINROF** (Spur)	0.0		
				(5.7)			
				Time over District Average speed per hour			

Note.—Oil Jct. to Ainrof operated as part of Bakersfield yard.

EASTWARD				Time Table No. 138 February 12, 1922.		WESTWARD	
Capacity of sidings in car lengths and location of Scales, Fuel, Water and Turning and Telephone Stations.			Distance from San Francisco	STATIONS	Distance from Porque		
			313.0	**TREADWELL JCT.** 0.2	2.4		
			313.2	KINROSS (Spur) 0.3	2.2		
			313.5	AMIGO (Spur) 0.2	1.9		
			313.7	ARMIGUS (Spur) 0.2	1.7		
			313.9	KINSALE (Spur) 0.1	1.5		
			314.0	FORFAR (Spur) 0.2	1.4		
			314.2	DERWENT (Spur) 0.5	1.2		
			314.7	CUANDO (Spur) 0.3	0.7		
			315.0	TUBIG (Spur) 0.2	0.4		
			315.2	HAYNAN (No siding) 0.1	0.2		
			315.3	CERTINA (Spur) 0.1	0.1		
			315.4	**PORQUE** (Spur)	0.0		
				(2.4)			
				Time over District Average speed per hour			

Note—Treadwell Jct. to Porque operated as part of Bakersfield yard.

EASTWARD							Time Table No. 138 February 12, 1922.		WESTWARD			
Capacity of sidings in car lengths, and location of Scales, Fuel, Water, Turning and Telephone Stations.	SECOND CLASS				Distance from San Francisco			Distance from Springville	THIRD CLASS			
				98 Mixed					99 Mixed			
				Leave Tues., Thurs., Sat.			STATIONS		Arrive Tues., Thurs., Sat.			
52 WY				7.00AM	274.8	DN-R	**PORTERVILLE-OLIVE ST.** 0.8	15.9	s 11.05AM			
					275.6		A. T. & S. F. CROSSING 2.5	15.1				
				f 7.14	278.1		ADOBE (Spur) 0.5	12.6	f 10.50			
					278.6		PERNU 1.4	12.1				
				f 7.23	280.0		WORTH 1.6	10.7	f 10.40			
27				f 7.31	281.6		MAGNESITE JCT. (Spur) 0.8	9.1	f 10.30			
30				f 7.40	282.4		SUCCESS 5.7	8.3	f 9.25			
				f 8.05	288.1		OLAVIOLE 2.6	2.6	f 9.00			
26 Y 26				s 8.20AM	290.7	D-R	**SPRINGVILLE**	0.0	8.45AM			
				Arrive Tues., Thurs., Sat.			(15.9)		Leave Tues., Thurs., Sat.			
				(1.20) 11.92			Time over District Average speed per hour		(2.20) 6.81			

Westward trains are superior to trains of same class in opposite direction.

MOJAVE AND SAUGUS SUBDIVISION.

	EASTWARD				WESTWARD
Capacity of sidings in car lengths and location of Scales, Fuel, Water, Turning and Telephone Stations.	FIRST CLASS 402 Mojave Owenyo Passenger Leave Daily	Distance from San Francisco	Time Table No. 138 February 12, 1922. STATIONS	Distance from Owenyo	FIRST CLASS 401 Owenyo Mojave Passenger Arrive Daily
WFYTOP Yard	3.30AM	380.7	DN-R **MOJAVE** 1.3	143.5	s 11.25PM
56	f 3.35	381.8	CHAFFEE 3.2	142.2	f 11.20
58	f 3.42	384.0	CAMBIO 4.3	139.0	f 11.11
57	f 3.51	388.3	TRESCAPE 4.6	134.7	f 11.02
58	f 4.00	392.9	NEURALIA 4.4	130.1	f 10.52
57	f 4.09	397.3	CINCO 5.2	125.7	f 10.42
East 58W West 60	s 4.20	402.5	CANTIL 2.8	120.5	s 10.32
	f	405.3	GYPSITE (Spur) 2.2	117.7	f
57	f 4.31	407.5	CENEDA 1.0	115.5	f 10.22
	f 4.33	408.5	SALTDALE 2.1	114.5	f 10.20
	f	410.6	TOBY 1.6	112.4	f
East 57 Y West 80	f 4.41	412.2	GARLOCK 4.2	110.8	f 10.13
58	f 4.50	416.4	GOLER 4.1	106.6	f 10.05
58	f 4.59	420.5	RAND 4.1	102.5	f 9.57
58	f 5.10	424.6	TEAGLE 3.8	98.4	f 9.49
67 Y	s 5.28	428.4	DN **SEARLES** 4.4	94.6	s 9.41
58	f 5.36	432.8	RADEMACHER 5.5	90.2	f 9.31
62	f 5.47	438.3	CODE 4.1	84.7	f 9.20
58	f 5.55	442.4	TERESE 4.8	80.6	f 9.12
57	s 6.04	447.2	DN INYOKERN 4.5	75.8	s 9.03
58	s 6.13	451.7	LELITER 4.6	71.3	s 8.54
58	s 6.22	456.3	BROWN 4.4	66.7	s 8.45
East 58 Y West 82	f 6.31	460.7	LINNIE 3.6	62.3	f 8.36
57	f 6.38	464.3	NARKA 4.0	58.7	f 8.29
59	s 6.46	468.3	LITTLE LAKE 3.2	54.7	s 8.21
East 57 Y West 57	f 6.53	471.5	MABEL 4.1	51.5	f 8.14
58	f 7.01	475.6	SYKES 4.3	47.4	f 8.06
58	f 7.09	479.9	TALUS 4.2	43.1	f 7.58
57 W	f 7.21	484.1	HAIWEE 4.4	38.9	f 7.50
62	f 7.29	488.5	LOCO 4.8	34.5	f 7.40
57	f 7.38	493.3	OLANCHA 4.4	29.7	s 7.30
62	f 7.50	497.7	D CARTAGO 4.6	25.3	f 7.22
62	f 7.59	502.3	MONACHEE 4.0	20.7	f 7.12
61	f 8.07	506.3	BRIER 4.0	16.7	f 7.04
62	f 8.15	510.3	SKINNER 4.0	12.7	f 6.56
62	f 8.23	514.3	DIAZ 4.5	8.7	f 6.48
East 66 West 63	s 8.36	518.8	LONE PINE 4.2	4.2	s 6.40
FY	s 8.50AM	523.0	D-R **OWENYO**	0.0	6.30PM
	Arrive Daily		(143.5)		Leave Daily
	(5.20)		Time over District		(4.55)
	27.00		Average speed per hour		29.18

Westward trains are superior to trains of same class in opposite direction.

SPECIAL INSTRUCTIONS.

☛ "SAFETY FIRST"

Extra Trains may pass, or run ahead of second and third class trains without receiving an order to do so.

1.

STANDARD CLOCKS.

Fresno Round House
Fresno Telegraph Office
Goshen Jct.
Coalinga
Exeter.
Porterville—Olive St.
Bakersfield—Telegraph Office
Bakersfield—Round House
Oil Jct.
Ducor
Kern Jct.
Mojave
Palmdale

2.

WATCH INSPECTORS.

Webb C. Ball,	**General Time Inspector,**	**San Francisco.**
Beland Bros.,	Local Inspector,	**Fresno.**
Hanford Jewelry Co.,	**Local Inspectors,**	**Hanford.**
G. D. Davidson Co., Entire Division,	**Local Inspectors,**	**Los Angeles.**
Henry Cassreil,	Local Inspector,	**Coalinga.**
F. B. Mitchell,	**Local Inspectors,**	**Visalia.**
R. A. Hubler,	**Local Inspector,**	**Porterville.**
H. Oppliger,	**Local Inspector,**	**Bakersfield.**
Newton Moore,	**Local Inspector,**	**Los Angeles.**

3.

BULLETIN BOARDS.

Fresno
Goshen Jct.
Kerman
Los Angeles Round House
Coalinga
Porterville—Olive St.
Bakersfield
Los Angeles
Mojave
Saugus
River Station
Exeter.
Ducor
Oil Jct.
Owenyo
Palmdale

4.

CLEARANCES.

Rule 83A will not apply at stations not telegraph offices, or where offices are closed.

(A) A train must not leave McKittrick or Coalinga without a clearance card (Form No. 2643).

(B) Trains to and from the Hardwick-Ingle line at Hardwick must obtain a clearance card when an operator is on duty.

(C) Trains running via Hanford and Visalia lines must obtain a clearance card before leaving Goshen Jct.

5.

REGISTERING.

At registering stations on single track, or at the end of double track when passing from single to double track, where trains are permitted to register by ticket as per Rule 83-B, conductors and telegraphers, or telephone operators, must comply with Rule 96, the same as at non-registering stations.

(A) Helper engineers of Santa Fe freight trains on joint track, will accept from conductors, information on prescribed form, showing the numbers of all superior trains that have arrived and left.

Exceptions.

(B) Oil Jct.	Only trains originating and terminating. Operator Oil Jct. will report arrival and departure of trains terminating and originating to operator Kern Jct., who will enter same on register and both operators will be held responsible for correct transmission of same.
Ducor	Only trains originating and terminating.
Rossi	Third class trains only.
Famoso	**Only trains to and from the Porterville line will register.**
Bakersfield	**Operator Bakersfield will report arrival of eastward trains** to operator Kern Jct., who will enter same on register and both operators will be held responsible for correct transmission of same.
Kern Jct.	**Arrival and departure of Santa Fe first-class trains will be** reported to operator at Bakersfield, who will enter same on register and both operators will be held responsible for correct transmission of same.
Lancaster	Only extras originating and terminating register.
Palmdale	Only extras originating and terminating register.
Tehachapi	Only second-class, third-class and extra trains register.

(C) **Trains will Register by Form 2642 as follows:**

Goshen Jct.	25, 26, 59, 60.
Kern Jct.	**S. P. passenger trains and westward Santa Fe trains.**

6.

TRAIN AND AIR INSPECTION.

Freight trains descending grade will stop 10 minutes, at following points, to allow trainmen to make thorough inspection of wheels and running gear of train:

Between Bakersfield and Mojave	**Bealville, Woodford, Marcel, Warren. Eastward freight trains handling P. F. E. and S. F. R. D. cars will make stops at Larose and Fram in addition.**
Between Mojave and Saugus	**Ravenna, Lang.**
Bakersfield-McKittrick Line	**Between Mile Posts 357 and 358.**
Mojave-Owenyo Line	Little Lake, Teagle, Goler.

Engines running light descending grades 1½% or over will stop at regular inspection points sufficient length of time for engineman to ascertain if tires and machinery are in satisfactory condition.

Between other points after a continuous run of 30 miles. Exceptions:

Bakersfield to Delano, 32 miles; Goshen Jct. to Fresno, 34 miles; Mojave to Palmdale, 33.1, without stopping to inspect train as per Rule 820 provided that in judgment of conductor and engineer condition of train will permit. Same exception will also prevail in opposite direction.

(A) Engines of freight trains cut off to take water when coupled to more than 20 cars.

(B) Engineers will not make running air tests over puzzle switches and bridges.

(C) In cases where there is question as to ability of engineers to hold trains on grades to proper speed, or make necessary stops, by use of air, conductor will see that sufficient hand brakes are set at summit of grade to insure proper handling of train. In setting hand brakes, each alternate brake should be set, beginning at head end and working toward rear. Hand brakes should not be permitted to remain set a sufficient time to cause heating, but should be released and those on alternate car set, change being made in this manner as often as necessary. In releasing hand brakes those to rear of train must be released first. When engineer requests assistance in handling trains on grades, conductors will **see that action is taken at once to render such assistance.**

(D) That proper inspection of running gear may be made by trainmen, in accordance with Rule 824 and permit of their boarding train, freight trains must not exceed a speed of eight (8) miles per hour when entering or pulling out of siding or leaving station.

(E) Rear end test between terminals as prescribed by Rule 17 of Rules and Regulations Governing Care and Operation of Air Brakes, etc., effective May 1, 1915, is required as follows:

For all trains wherever brake pipe has been parted.

Westward passenger trains stopping at Vincent and Tehachapi. Those not stopping must make running test.

Eastward passenger trains stopping at Tehachapi and Vincent. Those not stopping must make running test.

Westward freight trains at Vincent, Summit and Tehachapi. Those making tests at Summit need not make it at Tehachapi unless stopped for other cause.

Eastward freight trains at Summit and Vincent.

(F) In freight trains where helpers are coupled in rear of train, the last helper engineer to make coupling after brake pipe has been parted will sound one blast of the whistle for air test and the head engineer will, after charging up brake pipe, place his valve on lap and repeat the signal, **rear brakeman not opening angle cock at rear end until brake pipe has been recharged and leading engineer has sounded signal for the test. Other engineers in train must not whistle off until air test has been made.**

(G) When train is ready to go, engineer handling the air will wait sufficient time to allow air to equalize and will then sound two long blasts of the steam whistle, helpers if ready to go will answer with whistle in the usual manner, in order as they stand in train and will use throttles to hold slack.

(H) When helper engines have cut off at any point to take water, or for any other reason, in doubling up, enginemen of such engines will make reduction in train line pressure, if necessary, to allow leading engineer to equalize train line pressure.

(I) Conductor will report to Superintendent, by wire, any failure to properly control train by air brakes and will deliver to Car Inspector at first terminal list **showing tonnage of each car in train. Car Inspector will add to list the piston travel of each car in train, as shown by test made before road engine is cut off,** also result of **three-minute test of all retainers. The list will then be forwarded to Superintendent by first mail.**

(J) When taking siding to meet an opposing train, trainmen should station themselves where they can inspect running gear of the train passing, giving stop signals to them if any defect noticed, brakemen on opposing train watching for stop signals. (See Rule 861.)

(K) Pay close attention to clearance of steam shovels, derricks, machinery, etc., on flat cars, and see that clearance limits in published schedules of clearance is not exceeded, to avoid accidents passing through overhead structures or tunnels.

(L) The maximum tonnage rating per operative brake of 115 Ms. on both east and west side of Tehachapi Mountain and 120 Ms. eastward from Mojave to Saugus, must be strictly observed. Oil cars equipped with latest Westinghouse empty and loaded brake device will permit the handling of 150 Ms. per operative brake.

Steam Heat.

(M) Rear brakeman will open valve on rear of steam line and steam will be shut off of same on engine at the following points:

Mojave—Eastward and westward trains, mile board.

Bakersfield—Westward trains, east switch (old yard).

Bakersfield—Eastward trains, east switch Nome.

Goshen Jct.—Eastward and westward trains, mile board.

Fresno—Westward trains, Ice House.

Fresno—Eastward trains, junction east and west side line, Stockton Division.

At other points—Mile board.

(N) When steam hose is recoupled between engine and train not less than 90 lbs. of steam must be turned back. When line is fully charged pressure will be reduced to 40 lbs. for 8 cars and 5 lbs. additional for each car over 8.

METHOD FOR TESTING FOR TRIPLE, CAUSING UNDESIRED APPLICATION OF BRAKES (DYNAMITER).

(O) If test is made on grade, a sufficient number of hand brakes must be set to secure train.

The brake pipe must be fully charged and brake valve kept in running or release position according to the type of brake or valve. Westinghouse in running position and New York in release position.

Trainmen will then, starting from rear, station themselves so as to observe two cars apiece. The angle cock ahead of the cars being tested will then be closed and angle cock on rear of caboose opened very slowly, allowing a small flow of air, about the same as would be made from brake valve for a service application. If all brakes apply properly and show no bad triple action, close angle cock on rear of caboose.

The above procedure is to be followed throughout the train, first separating the hose between the forward car of the cut, already tested, and the rear car of the cut to be tested and closing the angle cock at the forward end of the leading car of the cut—the number of cars in each test depending upon the number of trainmen available, not to exceed two cars for each man. Air brake of car going into emergency will be cut out and report rendered on Form 2809.

After test is completed, and before train proceeds, rear end air brake test, as per Rule 17, must be made to insure all hose coupled and angle cocks in proper position.

7.

USE OF RETAINERS.

Pressure retaining valves on locomotive tenders must be used on all descending mountain grades.

(A) Retainers will be used on passenger trains on grades as follows:

EASTWARD TRAINS:—From Cameron to Mojave—All retainers.
WESTWARD TRAINS:—From Vincent to Harold—Necessary retainers.
From Tehachapi to Caliente—All retainers.

(B) On freight trains, retainers will be used on grades in accordance with Rule 54 of "Rules and Regulations Governing Air Brakes, Etc., effective May 1, 1915," as follows:

EASTWARD TRAINS:—From Cameron to Mojave.
From Vincent to Lang.
WESTWARD TRAINS:—From Vincent to Harold.
From Tehachapi to Caliente.
From McKittrick to Lokern.
From Mabel to Linnie.
From Searles to Garlock.

(C) Retainers will be used on other trains and under other conditions where in judgment of the engine and train crew it is deemed necessary to vary from the above rules.

(D) Where retainers are used the rate of speed of freight trains on any grade of over one per cent will not exceed 25 miles per hour, and on grades of this character, MORE THAN FIVE MILES LONG, FOR THE FIRST FIVE MILES THE TIME CONSUMED IN TRAVELING ANY ONE MILE SHALL NOT BE LESS THAN THREE MINUTES.

(E) The above maximum speed restriction will not affect the speed on heavier grades and other locations, where the maximum is now provided.

(F) Retainers on eastward freight trains entering Mojave yard must not be turned down until it is known positively that train is under control and almost stopped.

8. HELPERS.

(A) Helpers on freight and passenger trains will cut out at Vincent, unless otherwise instructed.

(B) Helper engines cut out at Summit and ordered through to Mojave will precede train from Summit, unless otherwise instructed.

(C) When a helper engine is to be coupled into a train copies of all orders affecting movement of the train at or beyond point from which helper is to be used, must be delivered to each helper engine crew before leaving the point at which coupled into train.

If helper engine is picked up at a closed or non-telegraph office a copy of orders affecting movement of train at or beyond that station, and copy of clearance card must be delivered to conductor of train at a preceding open telegraph office for delivery to the helper engineer before leaving station at which cut in.

(D) In taking water on freight trains with helper cut in, train will be cut ahead of first helper from head end who will back to point where he is to take water. After stopping, train will be again cut ahead of following helper, which in turn will back to water spout.

9. Helper engines between Tehachapi and Summit will be governed by following:

(A) Operator at Tehachapi will have a staff, and will deliver same to eastward trains having helpers to return from Summit, except as provided in Sections D, E and F.

Conductors of trains stopping at Tehachapi and requiring staff will personally procure same and deliver to leading helper engineer, personally notifying engineer handling train that he has done so.

For trains authorized to register by Form 2642, having helpers to return from Summit, operator will deliver staff to leading helper engineer and will hand to conductor and all other engineers in train, a clearance on which is written ‘‘Staff to Engineer.’’

(B) After receipt of staff train may proceed to Summit, keeping clear of superior trains, providing train has also been cleared as required by the rules and regulations of Operating Department.

(C) After an engineer has in his possession the staff, his engine and all engines at Summit may return coupled to Tehachapi regardless of opposing trains except first class.

(D) As section C provides that helpers are required to clear first-class trains the staff need not be delivered to first-class trains except when such trains have helper to cut out at Summit and there are no helpers at Summit with which it can couple. Helpers when waiting at Summit to clear first-class trains will not leave without ascertaining whether such first-class trains have helpers to couple in with them.

(E) When it is desired to run two or more trains to Summit, before allowing helper of any to return, operator will upon instructions from dispatcher deliver to enginemen and conductors of all such trains, except the last, in place of staff, clearance on which is noted, ‘‘Staff at Tehachapi,’’ provided operator has staff in his possession. Clearance so worded will be sufficient authority for trains to move to Summit as if staff had been received. To last train staff will be given. ‘‘Staff at Tehachapi’’ clearances do not authorize trains to return to Tehachapi. When train receives ‘‘Staff at Tehachapi’’ clearance and is passed at Tehachapi by another train having a helper, the train which is passed will not thereafter proceed without first returning to telegraph office and ascertaining whether the train passing has the staff. If the train passing is given the staff, the train which is passed cannot thereafter proceed until staff is returned, and conductor will personally surrender all clearances to operator.

(F) Staff will not be delivered to trains which have no engines to return from Summit. When there is no helper to return from Summit, ‘‘Staff at Tehachapi’’ clearance will be delivered (except to first-class trains) provided the operator has staff in his possession.

(G) On return to Tehachapi, engineer with staff will personally deliver it to operator without delay.

Trains moving on staff between Summit and Tehachapi will register at Tehachapi in following manner:

In first column: Staff.
Second column: Signals (None) and balance of information as required by register.

In registering out register on separate line in the usual manner.

10. In movement of light engines between Bakersfield and Mojave the number of engines coupled is restricted to four.

11. AUTOMATIC BLOCK SIGNALS.

Rule 504 is amended as follows:

When a train is stopped by a block signal, it may proceed when the signal indicates proceed.

ON SINGLE TRACK. Send a flagman in advance immediately, wait at least five minutes after the flagman has started, and then follow the flagman to the next distant or home block signal, in proceed position, or if the next distant or home block signal in advance is in plain view and in proceed position and track ahead is seen to be clear, proceed under control, not exceeding six (6) miles per hour. Flagman need precede train only to a point where the track ahead is seen to be clear to the next distant or home block signal in proceed position, but train will not exceed six (6) miles per hour to such block signal.

ON DOUBLE TRACK. A train may proceed immediately, running under control, not exceeding six (6) miles per hour, to the next distant or home block signal in advance, except that a flagman must precede the train when view is obscured by weather conditions, tunnels, or other obstructions.

(A) A train stopped at home signal on account of opposing train which can be seen taking siding, may immediately proceed at speed not exceeding six (6) miles per hour, to fouling point, provided track is seen to be clear to the fouling point.

(B) When a train which is to take siding is stopped by home signal at meeting point at which opposing train is standing on main track, it may proceed immediately, under control, not exceeding six (6) miles per hour, to the entering switch, provided track is seen to be clear to that switch.

(C) When a train which is to take siding at meeting or passing point or to enter terminal yards finds home signal other than interlocking signal in stop position on account of train to be met or passed standing on the main track, or on account of switch being lined up for receiving track, it may pass the home signal without stopping, when a trainman or switch tender is at the home signal giving proceed signals to indicate switch is open, and may enter siding or receiving track at speed not exceeding six (6) miles per hour, provided switch is seen to be open and track clear to fouling point of switch.

At Mojave, trains entering yard will be governed by the following signals:

(D) WESTWARD TRAINS:—Santa Fe by Hall Signal. Southern Pacific by Signal 3811 (minute block signal).

EASTWARD TRAINS:—Signal 3802 (minute block signal).

Trains arriving at Mojave from N. & C. line must stop before fouling main track regardless of position of derailer or signals received.

When necessary to signal westward trains, Herder will use yellow signal for Southern Pacific trains and green signal for Santa Fe trains. For eastward trains, Herder will use yellow signal.

Freight trains will not enter until signal is given by Herder.

(E) The following automatic block signals, governing trains entering and in yards, will be Minute Block signals.

Mojave:	Nos. 3802, 3805, 3806, 3811.
Tehachapi:	Nos. 3598, 3611.
Bakersfield:	No. 3157.
Goshen Jct.:	Nos. 2388, 2397.

(F) Home signals No. 3805 and No. 3806 (minute block signals), just west of Oil and Water Columns, between main track and siding No. 1, Mojave yard, are placed ‘‘back to back.’’ Signal No. 3805 governing westward trains is located on fireman’s side, who will be on lookout for change in position of signal. Helper engines occupying main track must stand just west of these signals to prevent delay to westward trains.

(G) If signals are at stop, wait one minute and then proceed under control not exceeding six (6) miles an hour. In stormy or foggy weather send the flagman ahead immediately and follow the flagman.

(H) When light is not burning in a distant or home block signal, speed must be reduced sufficiently to enable engineman to be governed by the position of the signal blade, and to observe the number of the signal, which will be reported as having light not burning from first train order office from which report can be made without delay to train.

(I) Signal failures or irreguarities (either action of arm or condition of light) will be reported to chief dispatcher by number from first open telegraph office.

(J) When block signals indicating position of switches are yellow boarded, trains will reduce speed to six (6) miles per hour through station limits until switches are passed.

(K) When the number plate of a home block signal is reversed, showing ‘‘yellow,’’ and signal indicates ‘‘stop,’’ train may pass without stopping, but, unless otherwise directed by train order or bulletin, will proceed with caution, to the next signal.

(L) Flagman preceding a train stopped by a block signal will watch carefully for broken rails or other defects of track, and when trains are authorized to proceed at six (6) miles per hour without flagmen in advance, both engineman and fireman will watch carefully for such defects.

(M) On single track in Block Signal limits, Rule 86, second paragraph, is modified as follows: An inferior train will clear the time of first-class trains in the same direction not less than ten (10) minutes.

(N) Within block signal limits, that portion of Rules 86 and D-86 reading ‘‘but must be clear at the time a first-class train, in the same direction, is due to leave the next station in the rear where time is shown’’ is cancelled.

(O) When necessary for trains or engines to cross over from one main track to another, or cross double tracks by crossover switches, five (5) minutes must elapse between the time the switches are thrown and movement actually begun. This in no measure relieves trainmen and enginemen from responsibility of protecting their trains as provided for in the rules, and does not apply in double track territory within the limits of established yards.

12. ‘‘19’’ ORDER.

Within automatic block signal limits, between Fresno and Saugus, the note under Rule 211 is modified as follows:

Form ‘‘19’’ train order may be issued to restrict the superiority of a train, except that form 31 must be used—

(A) When orders are delivered at a non-telegraph or closed telegraph station. (See Rule 217.)

(B) When necessary to restrict a train which has been cleared or the engine of which has passed train order signal. (See Rule 219.)

(C) When issuing an order form ‘‘G,’’ example 3.

(D) When giving any train right over all trains.

(E) When reducing a time order where necessary that dispatcher have signature of superior trains before completing order to an inferior train.

(F) Operator will fill out clearance, designating thereon numbers of orders, repeat to dispatcher train and order numbers as they appear on clearance and obtain O. K. with time and Superintendent’s initials, writing same before delivery in space provided for. Operator will retain carbon copy of clearance.

(G) Dispatcher must write train and order numbers in his train order book as transmitted by operator from clearance, and must designate time clearance was made O. K., not transmitting O. K. unless operator repeats numbers of all orders to be delivered to the train to which clearance is addressed.

(H) When ‘‘19’’ order restricting superiority is issued at station where superiority is restricted, train must be stopped by operator before delivery of order.

(I) Conductor’s and engineer’s attention is called to the importance of approaching at a moderate rate of speed telegraph offices where orders are to be received and the necessity for carefully checking clearance to ascertain positively that it is properly addressed and that orders received are those called for by clearance.

(J) Clearance outside automatic block signal limits must show numbers of all orders (both 31 and 19) and be O. K.’d by dispatcher same as within block signal limits.

(K) Following will govern relative to use of telephone by train and engine crews in handling of train orders and communicating with dispatcher:

(L) There is nothing to prohibit an engineer or conductor from voluntarily making use of telephone for asking dispatcher for train orders.

(M) In case of casualty or unavoidable accident, or act of God, or delay or wreck caused by obstructions of track, collision or other cause, or the failure of block signal, the telephone may be used to communicate with dispatcher and train orders may be sent direct to conductor or engineer.

(N) When a train has been delayed 15 minutes at a blind siding for any cause, conductor will be expected to call up dispatcher on either telephone at siding or with caboose phone. Telephones are located at blind sidings as shown in time table.

(O) The above restrictions as to 15-minute delay does not apply to crews of relief trains.

(P) Crews of relief trains may report by telephone for orders at stated hours, not exceeding three times per day.

(Q) In sending and repeating train orders by telephone or telegraphone they will be transmitted and repeated as per following example:

Second No. 25 Eng. 3205 wait at Newhall until
Nine fifty 950 P. M. for extra 2756 east.

The order should appear as quoted above when ready for delivery.

The manner of sending or repeating the order is as follows:

First pronounce the word ‘‘Second’’ and then spell it thus: ‘‘S-e-c-o-n-d’’; pronounce the word ‘‘Number’’ which will be abbreviated by ‘‘No.’’; pronounce the figures 2-5 and follow by spelling each digit, thus ‘‘T-w-o f-i-v-e’’; pronounce the word ‘‘Engine’’ which may be abbreviated in the order as ‘‘Eng’’; pronounce the engine number in figures as ‘‘3-2-0-5’’ then follow by spelling each figure as ‘‘t-h-r-e-e t-w-o n-a-u-g-h-t f-i-v-e’’; pronounce the words ‘‘wait at,’’ then pronounce the station name and follow by pronouncing each letter of the station name, as ‘‘N-e-w-h-a-l-l’’; pronounce the word ‘‘until’’ then pronounce the time ‘‘950’’ in the usual manner, then follow by spelling each word in the time, as ‘‘n-i-n-e f-i-f-t-y,’’ then pronounce the figures ‘‘9-5-0’’ followed by ‘‘P. M.’’; pronounce the word ‘‘for’’ also ‘‘Extra,’’ then name each figure in the number as ‘‘2-7-5-6’’ followed by spelling, as ‘‘t-w-o s-e-v-e-n f-i-v-e s-i-x,’’ and then pronounce the word ‘‘East.’’

You will note that the words ‘‘Number,’’ ‘‘Wait at,’’ ‘‘for,’’ ‘‘Extra’’ and ‘‘East’’ are merely pronounced and should not be spelled.

13. INTERLOCKING SIGNAL TOWERS.

(A) **Fresno Tower No. 1.**

(A. T. & S. F. Crossing 1.6 miles east of Fresno on Fresno-Friant Line):

For main track, one long sound of whistle (———).

To or from spur track, one long and one short sound of whistle (——— o).

(B) **Fresno Tower No. 2.**

(A. T. & S. F. Crossing 1.5 miles east of Fresno on Fresno-Exeter Line):

For main track, one long sound of whistle (———).

(C) **Calwa Tower.**

(A. T. & S. F. Crossing and double track 0.8 mile east of Calwa):

Eastward trains approaching end of double track will call for switch and derailer by one long, one short and one long sound of whistle (——— o ———).

Westward trains will sound one long sound of whistle for crossing and for double track (———).

Lower arm of signal located just east of crossing controls the admission of westward trains on to double track against the current of traffic.

Dwarf signal located between main tracks just west of tower controls eastward trains moving against the current of traffic.

(D) **Hanford Tower.**

(A. T. & S. F. Crossing 0.3 mile west of Hanford):

For main track, one long sound of whistle (———).

For crossing through siding, one long, one short and one long sound of whistle (——— o ———).

(E) **Tulare Tower.**

(A. T. & S. F. Crossing 0.3 mile west of Tulare):

For main track, one long sound of whistle (———).

(F) **Kern Jct. Tower.**

(A. T. & S. F. Crossing and Bakersfield-McKittrick Line 0.7 mile east of Bakersfield):

For main track, one long sound of whistle (———).

For movement over crossing on siding, one long, one short and one long sound of whistle (——— o ———).

For movement between S. P. and A. T. & S. F. main line, one long and one short sound of whistle (——— o).

For movement between main track and transfer track, one short, one long and one short sound of whistle (o ——— o).

(G) **General.**

For any movement against current of traffic on double track, give one long and one short sound of whistle (——— o).

When a train which has been given a proceed semaphore signal at any crossing does not wish to use crossing, one short and one long sound of whistle should be sounded for the information of the towerman (o ———).

(H)

Rule 630 is amended as follows:

Hand signals must not be used when the proper indication can be displayed by the interlocking signals. When hand signals are necessary the signalman must assure himself that the switches are properly lined and that the route is clear. Signals must be given from such a place on the ground, and in such a way, that there can be no misunderstanding on the part of enginemen or trainmen as to the signals, or as to the train or enginemen for which they are given.

A yellow flag must be used by day, and a yellow light by night, in giving hand signals.

Enginemen and trainmen must not accept a hand signal to proceed against an interlocking signal, except as provided in Rule 628. When hand signals are given for a train to pass an interlocking signal indicating "stop," train must be brought to stop and then proceed under control not exceeding six miles per hour, keeping a sharp lookout for open derailers and trains in conflicting routes.

Hand signals authorize movement only through the interlocking limits governed by the inoperative signal, and not through the automatic portion of the block, if any.

Rule 663 is amended as follows:

"Enginemen and trainmen must not accept a 'proceed' signal as against fixed signals except as provided for in Rule 630. When hand signals are given for trains to pass fixed signals at stop, trains must be brought to stop before passing interlocking signals, and may then proceed under control not exceeding six (6) miles per hour through the limits of the interlocking plant."

14. RAILROAD CROSSINGS NOT INTERLOCKED.

Lacjac	**A. T. & S. F. Ry.**
Monson	**A. T. & S. F. Ry.**
Visalia	**A. T. & S. F. Ry.**
Lillis	**Laton & Western Ry.**
Between Hub and Lynn	**Laton & Western Ry.**
Porterville and Adobe	A. T. & S. F. Ry.

15. At unprotected railroad grade crossings, trains approaching will sound one long blast of steam whistle at proper distance from crossing, while train is running, in accordance with Rule 14 (m). After train has stopped and before passing over such crossing, engineer will sound two short blasts of the steam whistle.

16. SPEED TABLE.

This table is for the purpose of determining speed per mile and must in no way conflict with rules restricting speed of trains.

Miles per Hour	1 Mile in Min. Sec.	Miles per Hour	1 Mile in Min. Sec.	Miles per Hour	1 Mile in Min. Sec.	Miles per Hour	1 Mile in Min. Sec.
6	10	21	2.51	31	1.56	41	1.27
8	7.30	22	2.43	32	1.52	42	1.25
10	6	23	2.36	33	1.49	43	1.23
12	5	24	2.30	34	1.45	44	1.21
15	4	25	2.24	35	1.42	45	1.20
16	3.45	26	2.18	36	1.40	46	1.18
17	3.31	27	2.13	37	1.37	47	1.16
18	3.20	28	2.8	38	1.34	48	1.15
19	3.9	29	2.4	39	1.33	49	1.13
20	3	30	2.0	40	1.30	50	1.12

17. MAXIMUM SPEED FOR WH ICH LOCOMOTIVES ARE COUNTERBALANCED.

Note.—All locomotives with the following exceptions are counterbalanced for a speed in miles per hour equal to the number of inches in diameter of driving wheels.

Class of Locomotive	Engine Numbers	Maximum Speed in Miles per Hour	Maximum Wheel Pressure
A-1	3000 to 3009	63	45120 lbs.
MC-1	4000 and 4001	53	42760 "
MC-2	4002 to 4016	53	42760 "
MC-4	4017 to 4028	53	43130 "
MC-6	4029 to 4043	53	43230 "
MC-6	4044 to 4048	53	42680 "
MK-2	3200 to 3202, 3205, 3206, 3210, 3211	49	46140 "
MK-4	3216 to 3230, 3232 to 3235	49	45560 "
MM-2	4200 to 4211	56	46300 "
T-6	2187, 2190, 2194, 2200, 2203, 2204, 2205	50	22740 "
T-6	2197, 2208	45	24110 "
T-28	2311 to 2314, 2316, 2317, 2320, 2323, 2325, 2327, 2328, 2330, 2342, 2343, 2352	54	46220 "
TW-2	2946, 2948 to 2953	43	25860 "
TW-4	2926 to 2931	44	26000 "

NOTE.—The above table is for the information of engineers and must not be considered in any way to authorize exceeding speed limit specified under "Speed Restrictions."

SPEED RESTRICTIONS—TRAINS WILL NOT EXCEED

Between—	Miles per Hour Passenger	Miles per Hour Freight
Fresno and Bakersfield	**50**	**35**
Bakersfield and ½ mile east of Sivert	**50**	**35**
Bena and Sivert westward freight trains		**35**
½ mile east Sivert and 1 mile west Ilmon	**40**	**30**
1 mile west Ilmon and 1 mile west Tehachapi	**30**	**18**
1 mile west Tehachapi and 1 mile west Cameron	**50**	**35**
1 mile west Cameron and Mojave	**45**	**18**
Mojave and Palmdale	**50**	**35**
Palmdale and Saugus	30	18
Fresno and Famoso via Sanger and Porterville	45	30
Kerman and Armona	**40**	**35**
Ingle and 1 mile west of Riverdale	**35**	**25**
1 mile west of Riverdale and Hardwick	**25**	**20**
Lynn and Hasset: Over Kings River Bridge No. 222C	6	6
Goshen Jct. and Exeter	40	30
Goshen Jct. and Armona	50	35
Armona and Crump	40	25
Crump and Alcalde	10	10
Fresno and Gordon (Except around curves between Barton and Maltermoro)	40	25
Barton and Maltermoro (on curves)	30	18
Gordon and Friant	30	18
Bakersfield and Gosford	40	25
Gosford and Olig (except as noted)	30	20
Lokern and Olig (with large loaded oil cars)...Days		15
" " " " " " " " ...Nights		10
Rossi and Stratford	15	15
Porterville and Springville	20	15
Mojave and Owenyo	35	25

SPEED RESTRICTIONS—Continued

Between outside switches of yards (outside City Limits):		
Fresno	15	10
Bakersfield, east of Nome	15	10
" west of Nome	35	20
Mojave	15	10
Through City Limits (regulated by Ordinances):		
Clovis	8	8
Fresno	8	8
Selma (between 5 a. m. and 11 p. m.)	10	10
Kingsburg (between 4 a. m. and 11 p. m.)	10	10
Tulare	8	8
Visalia	6	6
Hanford	8	8
Exeter	10	10
Lindsay	10	10
Porterville	8	8
Bakersfield	6	6
Fowler	10	10
Over Turnout Switches:		
Kerman (eastward trains)	20	20
Calwa Tower, end of double track (eastward trains)	15	15
Exeter, south leg of Wye connecting with Porterville Line	15	15
All points Santa Fe 900 and 1600 class engines	4	4
" " Consolidation and Mallet engines	10	10
On Sidings:		
When clear of lead on straight track, Santa Fe 900 and 1600 class engines	8	8
Over west leg of Wye at Searles: Consolidation engines	6	6

Freight Mallets:

Will not exceed 25 miles per hour at any point (this in no way to conflict with restrictions where speed is now less than this maximum).

Milkado Engines:

Will not exceed 45 miles per hour at any point (this in no way to conflict with restrictions where speed is now less than this maximum).

2-10-2 **Type Engines (3652 to 3667 inclusive):**

Will not exceed 30 miles per hour at any point and 18 miles per hour on curves of six (6) degrees or over. **These engines must under no circumstances be used in passenger service.**

Engines on passenger trains:	
Consolidation	Maximum speed allowed passgr. trains.
2-10-2 Type Engines (3600 to 3651 inclusive)	Maximum speed 45 miles per hour.
When meeting or passing on double track	**20 miles per hour except where speed restrictions are less will be governed thereby.**
Engines running light:	
8-wheel, 10-wheel, Mogul, Mikado, Pacific and Engines 3600 to 3651 inclusive	35 miles per hour. Except where speed restrictions are less, be governed thereby.
Consolidation and 2914 class	**25 miles per hour where freight trains are restricted to 18.**
Santa Fe 900 and 1600 class engines	20 miles per hour where freight trains are restricted to 18.
Engines not above specified	**Freight train speed.**
Engines backing up:	
Consolidation, Mikado, Mallet and 2-10-2 type between Bakersfield and Saugus	**15 miles per hour.**
Consolidation and Mikado between Fresno and Bakersfield	**20 miles per hour.**
Fernando Helpers (2914 class) between Palmdale and Saugus	**20 miles per hour.**
All others (except Consolidation, Mallet, Pacific, Mikado and 2-10-2 type) over main track and from Kerman to Goshen Jct.	25 miles per hour.
Over other lines	20 miles per hour except where speed restrictions are less, be governed thereby.
From West Wye switch to station at Goshen Jct. Goshen Jct.-Coalinga Line	10 miles per hour.
Yard Engines (outside yards)	15 miles per hour.

SPEED RESTRICTIONS—Continued.

Trains handling relief train:

Main line and from Goshen Jct. to Kerman.............**25 miles per hour.**
Over other lines.............**15 miles per hour except where freight train speed is less, be governed thereby.**

18. Trains entering sidings will do so under control. Responsibility for collision is placed with entering train.

(A) When a train or a portion of a train takes the siding it must not stop foul of the main track to allow the brakeman to get on after closing the switch but first pull into clear.

19. Yellow flags and lamps or slow boards will be placed one-fourth mile each side of structures or pieces of track over which speed of trains must not exceed fifteen (15) miles per hour or rate of speed specified by bulletin, train orders, or slow boards.

(A) When in an engineman's judgment, track which is protected by slow order is safe for a higher rate of speed than is allowed by such slow order, engineman will notify the conductor, stating what speed he considers safe, and conductor will then send a message to Superintendent from first open telegraph office covering information.

20. YARDS.

Rules 93 and D-93 are revised as follows:

"Within yard limits the main track may be used, protecting against first class trains.

All trains must approach yard limits and pass through yards under control."

(A) Yards are established at the following stations:

Fresno
Bakersfield
Tehachapi
Mojave
Goshen Jct.
Hanford
Visalia
Porterville
Exeter
Coalinga
Armona
Hardwick

(B) Air whistle has been installed in yardmaster's office, Bakersfield, connected with tower at Kern Jct. When conductor eastward train reaches tower he will secure information relative any trains due to arrive prior to time set for his departure and, if not, will sound one long, one short and one long blast of air whistle, and brakemen must station themselves where they can hear whistle and signal head engineer to pull down so helpers can cut in.

21. At Fresno, all trains from Fresno-Friant and Fresno-Porterville Lines will stop at junctions of these lines when entering yard.

22. At Fresno, eastward trains entering yard will be governed by signals from herder as follows: Trains from Merced Line green signal, trains from Kerman Line yellow signal.

23. At least two loaded steel underframe cars must be placed immediately ahead of Mallet or 2-10-2 type engines that are engaged in pushing.

24. Rear end of head cut of eastward freight trains leaving Bakersfield must be pulled down far enough to permit of coupling rear section on straight track. Rear sections must clear all leads before coupling up and making rear end air test.

25. OVERHEAD STRUCTURES.

Less than 22 feet above top of rails.

MAIN LINE.

Mile Post	Between Stations	Structures	Height
434.8	Russ-Lang	Tunnel No. 17½	18′-7¼″
434.8	" "	Water Flume	19′- 0″
435.9	" " 3rd Crossing	Bridge over Santa Clara River	21′- 2½″
436.1	" " 4th "	" " " " "	21′- 9½″
436.3	" " 5th "	" " " " "	21′- 9½″
436.8	" " 7th "	" " " " "	21′- 8½″
436.9	" " 8th "	" " " " "	21′- 9½″
437.4	" " 10th "	" " " " "	21′- 7½″
437.0	" "	Tunnel No. 18	21′- 8⅜″
439.5	Lang-Humphreys	" " 20	18′- 2⅜″
440.1	" "	" " 21	17′- 7¾″
441.5	" "	" " 22	17′- 8⅜″
445.3	Humphreys-Honby	" " 23	18′- 4⅞″
449.7	Honby-Saugus	" " 24	18′- 1¾″

(A) **BETWEEN MOJAVE AND OWENYO**

Mile Post	Between Stations	Structure	Height
426.8	Teagle-Searles	Tunnel 29	21′-2″
523.0	Owenyo	Highline trestle on Calif. Alkali Co.'s Spur	16′- 0″

Bakersfield.

(B) Sand house located on turnout track Bakersfield roundhouse will not clear man on top or side of car.

All employes are warned that it is dangerous to stand erect on cars, particularly of extraordinary height, while passing any of these points and must use necessary precaution to protect themselves from injury.

26. SURGEONS

NAME	LOCATION	DISTRICT—Between
Dr. F. K. Ainsworth, Manager and Chief Surgeon	San Francisco, Cal.	All Points.
Dr. O. B. Doyle, District Surgeon	Fresno, Cal.	Fresno, Friant, Kingsburg and Ivesta, Cal.
Dr. J. D. Morgan, Asst. District Surgeon	Fresno, Cal.	
Dr. D. H. Trowbridge, Oculist and Aurist	Fresno, Cal.	
Dr. J. D. Wagner, Emergency Surgeon	Selma, Cal.	
Dr. H. W. Nielson, Emergency Surgeon	Fowler, Cal.	
Dr. A. E. Skoonberg, District Surgeon	Sanger, Cal.	Ivesta and Fargo.
Dr. G. A. Hawkins, District Surgeon	Reedley, Cal.	Fargo and Monson.
Dr. J. C. Paine, District Surgeon	Exeter, Cal.	Monson and Burr.
Dr. Paul R. Walters, District Surgeon	Dinuba, Cal.	
Dr. T. D. Smith, District Surgeon	Kingsburg, Cal.	
Dr. M. S. McMurtry, Emergency Surgeon	Clovis, Cal.	
Dr. R. N. Fuller, District Surgeon	Tulare, Cal.	Kingsburg and Earlimart.
Dr. J. A. Copeland, District Surgeon	McFarland, Cal.	
Dr. C. M. White, District Surgeon	Visalia, Cal.	Goshen Jct. and Exeter.
Dr. C. T. Rosson, District Surgeon	Hanford, Cal.	Goshen Jct., Armona and Caruthers.
Dr. J. C. Drake, District Surgeon	Kerman, Cal.	Kerman and Caruthers.
Dr. W. W. Goodrich	San Joaquin, Cal.	Ingle and Hardwick.
Dr. Wm. P. Byron, District Surgeon	Lemoore, Cal.	Armona and Huron.
Dr. G. T. Mountford, District Surgeon	Coalinga, Cal.	Huron and Alcalde.
Dr. S. A. Barber, District Surgeon	Porterville, Cal.	Zante and Famoso.
Dr. P. H. Blong and Dr. H. R. D. Shoemaker, District Surgeons	Lindsay, Cal.	Burr and Zante.
Dr. A. I. Fraser, District Surgeon	Bakersfield, Cal.	Earlimart, Bealville and Gosford.
Dr. N. N. Brown, Consulting Surgeon	Bakersfield, Cal.	
Dr. C. W. Kellogg Consulting Surgeon	Bakersfield, Cal.	
Dr. F. A. Hamlin, Oculist and Aurist	Bakersfield, Cal.	
Dr. H. Hildreth, Emergency Surgeon	Delano, Cal.	
Dr. John T. Bernard, District Surgeon	Tehachapi, Cal.	Bealville and Cameron.
Dr. C. C. Warner, District Surgeon	Mojave, Cal.	Cameron and Rosamond.
Dr. C. B. Caldwell, District Surgeon	Cartago, Cal.	
Dr. M. A. Williamson, District Surgeon	Lone Pine, Cal.	Brown and Owenyo.
Dr. S. H. Savage, District Surgeon	Lancaster, Cal.	Rosamond and Ravenna.
Dr. J. E. Wheat, District Surgeon	Fernando, Cal.	Ravenna and Saugus.
Dr. S. B. Degnan, District Surgeon	McKittrick, Cal.	Gosford and Olig.
Dr. Geo. A. Meracle, Emergency Surgeon	Caruthers, Cal	
Dr. Frank D. Bishop, Emergency Surgeon	Palmdale, Cal.	

Note.—Emergency Surgeons should only be summoned for temporary treatment when prompt attention is required and when patients cannot be sent to or await arrival of Division or District Surgeon

27. LOCATION HOSPITAL STRETCHERS.

Exeter.
Porterville.
Bakersfield Emergency Hospital.
Bakersfield Relief Train.
Bakersfield Car Shops.
Bakersfield Machine Shops.
Bakersfield Baggage Room.
Fresno Storeroom.
Fresno Relief Train.
Tehachapi.
Mojave Car Shops.
Mojave Relief Train.
Mojave Baggage Room.
Owenyo.
Saugus.
Fresno Baggage Room.
Goshen Jct.
Coalinga.
Hanford.

28. HOSPITALS FOR SAN JOAQUIN DIVISION.

General Hospital, S. P. Hospital, San Francisco, Cal. Division Hospital, Crocker Street Hospital, Los Angeles, Cal. Emergency Hospital, Bakersfield, Cal.

29. AVERAGE WEIGHTS OF PASSENGER TRAIN CARS—Pounds.

Kind of Car	Wood	Steel	Steel Underframe
Baggage	75,000	91,000	
" (Dynamo)		101,000	
" and Mail 60,		97,000	92,000
" and Mail 69,	75,000	122,000	
" and Passenger	65,000		
Buffet		131,000	122,000
" (Dynamo)		146,000	
Business	108,000	179,000	136,000
Chair	84,000	98,000	
Coaches	75,000	95,000	
Dining	131,000	146,000	138,000
Express, Horse	79,000		
Express, Refr. (Am. Ry. Exp.) Nos. 40 to 154.			78,000
" " " " " Nos. 155 to 224.			89,000
" " " " " Nos. 500 to 506.			110,000
" " " " " Nos. 1101 to 1175			85,000
" " (GN RR)	70,000		
" " (NP RR)	60,000		74,000
Observation	122,000	144,000	128,000
Postal 40,		72,000	
" 60,		111,000	
Pullman Observation	124,000	148,000	142,000
" Parlor	115,000	149,000	142,000
" Standard Sleeper	125,000	152,000	145,000
" Tourist	94,000		133,000
Tea and Silk	48,000		

30. JUNCTION SWITCHES AND SIDINGS.

(Switches to be set and locked as follows):

El Prado	**Fresno-Friant Line and S. J. E. R. R. tracks for Fresno-Friant Line.**
Fresno	Stockton Division main Line and Kerman Line for Stockton Division.
Fresno	**Fresno-Bakersfield Line and Fresno-Porterville Line for Fresno-Bakersfield Line.**
Fresno	**Fresno-Friant Line and Fresno-Porterville Line for Fresno-Porterville Line.**
Kerman	**Armona and Stockton Division tracks for Stockton Division track.**
Ingle	**H. & S. L. Line and Stockton Division tracks for Stockton Division track.**
Hardwick	**H. & S. L. Line and Armona-Kerman Line for Armona-Kerman Line.**
Armona	**Goshen Jct.-Coalinga and Armona-Kerman Line for Goshen Jct.-Coalinga Line.**
Rossi	**Goshen Jct.-Coalinga Line and Rossi-Stratford Line for Goshen Jct.-Coalinga Line.**
Goshen Jct.	**Visalia and Hanford Lines with Fresno-Bakersfield Line, both for Fresno-Bakersfield Line.** **Visalia main track on siding for the siding.**
Exeter	**Visalia and Sanger Lines for Visalia Line.**
Porterville	**P. & N. E. and Famoso-Exeter Line for Famoso-Exeter Line.**
Famoso	**Fresno-Bakersfield Line and Porterville Line for Fresno-Bakersfield Line.**
Oil Jct.	**Fresno-Bakersfield Line and Oil City Line for Fresno-Bakersfield Line.**
Gosford	Bakersfield-McKittrick Line and Sunset Line for McKittrick Line
Mojave	**Bakersfield-Mojave Line and Mojave-Owenyo Line for Bakersfield-Mojave Line.**
Saugus	**San Joaquin Division main track and Los Angeles Division track for San Joaquin Division main track.**

SPECIAL INSTRUCTIONS—Concluded.

31. Double track in operation between 100 feet east of Kern Jct. Tower and 100 feet west of west switch Magunden siding, over which double track rules will govern.

Normal position of switch at west end of double track Kern Jct. will be for westward trains. Eastward trains must know that this switch is properly lined before attempting to pass over it, calling for same by four blasts of steam whistle (Rule 14-J) if necessary.

Normal position of switch at east end of double track (Magunden) will be for eastward trains. Bracket signal opposite this switch will indicate position of same.

When switch tender not on duty crews will take care of their own switches.

Southern Pacific westward freight trains will diverge at Kern Jct. at east end of train yard.

All Westward trains will reduce speed to 10 miles per hour approaching double track switch at west end of Magunden, all trains will reduce speed to 10 miles per hour passing over switch at west end of double track.

East end of double track will be known as Magunden station.

32. At Goshen Jct. westward trains on Visalia Line will stop at stop board located at east end just opposite cross-over from Visalia Line to Fresno-Bakersfield Line.

33. At Goshen Jct., the end of the Visalia main track will be at the point east of the station where first cross-over enters into the Visalia Line.

34. At Famoso, the end of the Porterville main track will be at the point west of the station where the cross-over from the main track enters into Porterville Line.

(A) That part of this track between the cross-over and the station will be used as siding, and trains using same will conceal headlight and display markers in accordance with Rules 17 and 19.

35. At Visalia, all trains will stop at Santa Fe tracks, and will not pass over crossing without receiving proceed signal from flagman, who must precede them.

36. At Exeter, all eastward trains will stop at stop board at junction east leg of wye with Porterville Line.

37. Sunset trains will be permitted to occupy main track between station train order signal and junction at Gosford without train orders to do so. All trains will approach junction switch at Gosford under control and be governed by Rules 83, 98 and 99 of Book of Rules.

38. At Bena engines will not go beyond a point 300 feet from switch into pit. Cars must be used in switching if necessary to go back of that point.

39. At Caliente, Bealville and Marcel siding next to main track will be known as eastward siding and be used by eastward trains; back track will be known as westward siding and be used by westward trains.

40. Freight trains will not go to Cliff for passenger trains, unless can get into clear or so instructed by dispatcher.

41. At Rowen, trains taking siding will comply with the following:

(A) First-class trains will use middle siding entering at first cross-over.

(B) Eastward trains, except first class, will enter at extreme west switch.

(C) Westward trains, except first class, will enter at extreme east switch.

(D) All trains, except first class, will use middle siding only under flag protection unless instructed by train order that middle siding is clear, but will not use the same when first-class trains are due to meet there.

(E) Siding between east switch and east cross-over is designated as east siding.

(F) Siding between cross-over switches is designated as middle siding.

(G) Siding between west cross-over and west switch is designated as west siding.

(H) Inside cross-over switches will be lined for siding.

(I) Trains using sidings will depart through cross-overs.

42. At Woodford track on north side of main track will be used as siding for trains in both directions. House track must not be used for setting out or storing of cars.

43. At Summit, the siding known as "Old Siding" will be kept for use by Train 342, in cutting out helpers. Long track south of main track will be used for siding by other trains, and trains using same will enter at the extreme west or east switches.

44. Tracks at following stations must not be used by Mallet, Decapod or large 2-10-2 engines: Spur tracks at Sivert, Gravel Pit, Bena, Caliente, Bealville, Rowen, Cable, Gloster, Harold, Ravenna, Russ, Lang, Humphreys and Team track Honby.

45. At Honby, back track will be used as siding by freight trains and switches are so set. When necessary for passenger trains to take siding at that point, they will use the inside track up to point of cross-over.

46. Cross-over switches opposite station Tehachapi will be considered switches where inferior trains enter sidings, and time will apply to these cross-over switches.

(A) Westward trains holding main track Tehachapi will stop clear of cross-over switch opposite west end station building.

(B) Eastward trains holding main track Tehachapi will stop clear of cross-over switch opposite east end of station building.

(C) No. (2) two track will be known as westward siding and be used by westward trains. (Cars must not be stored on No. 2 track.)

(D) That portion of siding extending from cross-over switch opposite west end of station building to east end of siding will be known as eastward siding.

47. Inside west switch leading to engine storage track on east leg of wye, Porterville yard, will be left lined for wye.

(A) Engines left on engine storage track Porterville, must be headed west.

48. Track next to and north of main track at Ducor will be known as passing siding or No. 1 track; next track north of this track, or second track north of main track, will be known as Santa Fe main or No. 2 track. Santa Fe trains will use switch at extreme east end on arrival at Ducor to enter or leave Southern Pacific main track. Inside switches will be left lined at all times for passing siding at Ducor, except when actually in use.

(A) Santa Fe trains will under no circumstances obstruct Southern Pacific main track without first ascertaining if all trains overdue have arrived and left.

MISCELLANEOUS.

49. Approaching tunnels, by day, when within 300 feet, headlight will be displayed and continued until tunnel is passed.

(A) Electric headlights on locomotives have been equipped with dimmers for the purpose of dimming headlights when occupying main track at meeting points or standing on main track in yards, or at other points where use of full power light interferes with vision of crews of other engines.

(B) Night signals will be displayed on all trains between tunnel (½) one-half and Cable and between Russ and Saugus through tunnels in this territory.

50. To avoid confusion, the following communicating signals will be observed:

(J) oooooo When running, increase train heat.

(K) ———— When running, look back for hand signals.

51. Engines larger than 1469 will not be run between Crump and Alcalde.

52. Cars of 35 tons or over will not be run over bridge crossing Kings River, one mile west of Hardwick on Hanford and Summit Lake Railway. Such loads will be handled via Ingle.

53. All westward trains including helper engines will not take water at Caliente unless absolutely necessary, then take their supply from the west tank.

54. Do not take water on Visalia Electric track at Exeter.

55. Do not allow engines or cars to be left standing on jail track at Visalia, within 100 feet of Gordon Street on east end of this track.

56. Cars will be placed at least 100 feet back on either side of public street or road crossing when parting trains for the purpose of clearing the crossings, or when setting cars out at a station.

57. Engineers on light engines when stopping at Tehachapi to eat, will place engine out of the way and not block siding. Engines will not be left at water columns on the long siding.

58. When dead engine in train to be set out, place it first out, to facilitate handling in picking up.

59. Mixed trains carrying outfit cars occupied by employees should place such cars immediately ahead of passenger cars.

60. Wooden coaches must not be placed between steel cars when possible to avoid it.

61. One or two lights must be burning in coaches in Trains 107 and 108 passing through tunnels.

62. Employees and others, except in actual discharge of their duties, are prohibited from riding on pilot or foot boards of engines.

63. Brakeman on Train 109 after announcing Exeter Station will announce the location of Visalia Electric car for Lemon Cove as standing directly behind station.

64. To prevent personal injury to passengers account their attempting to alight from trains, trainmen will protect all vestibules opened until train stops.

65. Trains will use caution in passing trains receiving or discharging passengers at a station and cars will not be moved between such train and the platform at which passengers are being received or discharged unless preceded by flagman and then only when absolutely necessary.

66. Trainmen will see that the canopy on observation cars is rolled up under the hood of the car sufficiently to permit unobstructed view of markers at night.

67. That part of third paragraph of Rule 221-A reading "but trainmen will relight the signal" is cancelled.

68. When doubling, engine running for water, or for any other purpose, it becomes necessary to leave a portion of a train on the main track, a red flag by day and a red light by night will be placed on the head car of the standing cut of cars, and in addition two torpedoes placed not less than one-fourth mile in advance thereof. Enginemen must know the location of cars thus left standing and must use extreme care in returning for rear portion of train.

69. On double track lines when a train encounters a fusee burning red on or near the track, train will stop and may then proceed cautiously, not exceeding six (6) miles per hour, to the obstruction, or until clear signal is reached, or track is known to be clear.

70. When train encounters a red light or red flag on either side of single track, unattended, they will protect to the rear and flag ahead for one-half (½) mile.

(A) When two or more main tracks are involved, unattended red or yellow signals will be placed on right hand side of track in direction bound.

71. When one torpedo is exploded, train will stop as per Rule 15. If no person is at hand to explain placing of the torpedo, train may proceed as hereinafter provided:

(A) If view is obscured in any manner, flagman will be sent ahead for a distance of at least one-half mile.

(B) If track is seen to be clear or (within automatic block limits) if signals indicate "proceed," train may proceed under control not exceeding six (6) miles per hour for a distance of one-half mile before resuming full speed.

72. In protecting rear end of passenger trains, rear brakeman will be governed by the following:

(A) "Each time train stops rear brakeman will take position not less than thirty (30) feet from rear of same, having in his possession necessary flagging equipment."

73. Practice of dropping cars on grades will be discontinued except where it is impossible to switch with an engine, and where absolutely necessary to drop cars on grades, the following rules must be observed:

(A) Hand brakes will be tested on all the cars before drop is made to ascertain if in good working condition.

(B) Heavily loaded cars will not be dropped singly; enough cars must be added to insure absolute safety. Not more than five cars will be dropped at one time.

(C) Two brakemen will ride each cut. Cars will not be cut off while moving; they must be allowed to start from a standing position. Cars will not be dropped on a track not protected by a derailer, or on main track unless it be blocked by other cars or engines.

(D) Cars to be dropped should be as close as possible to the turnout to be used before they are allowed to start, and at no time will they be allowed to attain a speed greater than five (5) miles per hour. Brake club will be used in setting the brakes.

74. Conductors called for relief trains east of Bakersfield will report direct to Kern Jct. Tower for orders and immediately advise yard office of their arrival, so there will be no question as to whether conductor is on hand or not.

(A) Conductors on westward relief trains from Bakersfield report at telegraph office for orders, also notifying yard office immediately for same reason as above stated.

(B) To expedite movement of relief outfit out of terminals, report as quickly as possible when called and not wait to eat as meals will be provided on relief outfit.

75. Your attention is called to California Senate Bill No. 847, Chapter No. 168, commonly known as the "Full Crew Bill," the provisions of which became effective August 10, 1913. The following memorandum illustrates the number of brakemen it will be necessary to provide on freight trains on San Joaquin Division as result of this measure:

Please note limits of grade on the Main Line Bakersfield to Saugus:

Grade.	No. Cars.	No. Brakemen.
1% or under	Less than 50	2
"	50 to 75	3
"	76 to 100	4
"	101 to 125	5
1% to 1½%	Less than 50	2
"	50 to 62	3
"	62 to 87	4
"	87 to 112	5
Over 1½%	Less than 50	2
"	50 to 57	3
"	58 to 72	4
"	73 to 87	5

The following are grade maximums on the San Joaquin Division:

1% or Under—	1% to 1½%—	Over 1½%—
Fresno-Bakersfield	Bakersfield-Ilmon	Ilmon-Tehachapi
Fresno-Friant	Tehachapi-Eric	Eric-Mojave
H. & S. L.	Mojave-Rosamond	Palmdale-Saugus
Goshen Jct.-Alcalde	P. & N. E.	Mojave-Owenyo
Goshen Jct.-Exeter		Bakersfield-Olig
Goshen Jct.-Porterville		
Famoso-Porterville		
Rossi-Stratford		
Kerman-Armona		
Rosamond-Palmdale		

RATING OF LOCOMOTIVES--SAN JOAQUIN DIVISION In Ms. of 1000 pounds back of tender

For Through and Local Trains in M's of 1000 Lbs. Back of Tender.

Nominal Class	Official Class	Engine Numbers	Boiler Pressure	Bakersfield and Fresno. Bakersfield and Kerman via Armona.	Bakersfield to Mojave.	Mojave to Saugus.	Saugus to Bakersfield.
E-9	E-63 17/24 52	1309	140	1930	240	360	290
E-10	E-63 17/24 47	1320 to 1349	140	1950	270	390	320
E-5	E-69 18/24 69	1386, 1387, 1389, 1390, 1392 to 1394, 1396, 1397, 1401	165	2430	300	400	360
E-23	E-73 20/24 89	1433 to 1443	190	3310	430	570	510
E-23	E-73 20/24 92	1445 to 1458	190				
E-24	E-69 18/26 74	1464 to 1467, 1469, 1471	165	2670	320	440	390
E-27	E-73 20/26 113-S	1526 to 1540 (Superheated)	210	4030	540	710	640
E-27	E-73 20/26 100	1526 to 1540 (Saturated)	200	3710	500	660	590
M-4	M-63 20/28 126	1615 to 1719	190	4270	630	810	730
M-8	M-63 21/28 159-S	1720 to 1724, 1770 to 1779 (Superheated)	200	5250	790	1020	920
M-6	M-63 21/28 150-S	1725, 1727 to 1769, 1780 to 1803 (Superheated)	200				
M-8	M-63 21/28 156	1720 to 1724, 1726, 1770 to 1779 (Saturated)	200	5000	740	960	870
M-6	M-63 21/28 144	1725, 1727 to 1769, 1780 to 1803 (Saturated)	195	4860	730	940	850
M-9	M-63 21/28 150-S	1804 to 1822 (Superheated)	210	5540	850	1090	990
M-9	M-63 21/28 147	1804 to 1822 (Saturated)	200	4990	740	960	870
T-16	T-57 18/24 80	2039 to 2073, 2081, 2082, 2095	165	2880	400	530	480
T-16	T-57 18/24 76	2094	150	2600	350	470	420
T-10	T-57 18/24 86	2134 to 2152	160	2770	380	500	450
T-9	T-57 18/24 96	2155, 2175, 2180	170	2960	400	530	480
T-9	T-57 18/24 92	2170, 2172	170	3190	420	550	490
T-3	T-69 20/26 113	2212 to 2220	180	3510	470	620	550
T-2	T-63 19/24 105	2221 to 2234	160	2810	360	470	430
T-1	T-63 20/26 112	2235 to 2244, 2246 to 2273	180	3840	560	730	660
T-25	T-69 20/28 134	2274 to 2281	200	4230	590	770	690
T-27	T-69 20/26 124	2282	180	3490	440	600	530
T-23	T-63 21/28 144-S	2301 to 2308, 2310 (Superheated)	210	5560	870	1010	1000
T-23	T-63 21/28 144	2301 to 2308, 2310 (Saturated)	200	4890	750	960	870
T-28	T-63 22/28 162-S	2311 to 2352 (Superheated)	210	6060	930	1190	1080
T-28	T-63 22/28 160	2311 to 2352 (Saturated)	200	5470	820	1060	950
T-31	T-63 22/28 162-S	2353 to 2362	200	5750	869	1110	1010
P-1	P-77 22/28 141-S	2400 to 2427 (Superheated)	210	5010	700	910	820
C-2	C-57 22/34 172-S	2600 to 2611 (Superheated)	190	6010	950	1210	1100
C-2	C-57 22/34 172	2600 to 2611 (Saturated)	185	5750	890	1140	1030
C-4	C-57 22/34 176-S	2612 to 2623 (Superheated)	190	5990	930	1190	1080
C-4	C-57 22/34 176	2612 to 2623 (Saturated)	185	5750	880	1130	1020
C-5	C-57 22/30 187-S	2624 to 2679 (Superheated)	210	6680	1050	1340	1220
C-5	C-57 22/30 180	2624 to 2679 (Saturated)	200	5950	910	1170	1060
C-5	C-57 22/30 185-S	2680 to 2693 (Superheated)	210	6660	1030	1320	1200
C-5	C-57 22/30 178	2680 to 2693 (Saturated)	200	5960	920	1180	1070
C-9	C-57 22/30 194-S	2513 to 2599, 2752 to 2830 (Superheated)	210	6660	1030	1320	1200
C-8	C-57 22/30 192-S	2698 to 2751 (Superheated)	210				
C-10	C-57 22/30 194-S	2831 to 2836, 2839 to 2857 (Superheated)	210				
C-9	C-57 22/30 187	2513 to 2599, 2752 to 2830 (Saturated)	200	5930	890	1150	1040
C-8	C-57 22/30 184	2698 to 2751 (Saturated)	200				
TW-3	TW-50 20/26 120	2932 to 2939, 2941 to 2945	170	4230	650	830	750
A-3	A-81 20/28 112-S	3025 to 3071 (Superheated)	210	3970	500	670	600
A-3	A-81 20/28 105	3025 to 3071 (Saturated)	200	3610	430	590	520
Mk-5	Mk-63 26/28 210-S	3237 to 3249, 3270, 3271	200	8090	1300	1660	1500
Mk-6	Mk-63 26/28 210-S	3250 to 3269	200				
F-1	F-63 27½/32 273-S	3600 to 3652	200	9700	1530	1950	1770
F-3	F-63 29½/32 297-S	3653 to 3667	200		1730	2210	2000
TW-8	TW-54 21/32 155	2914 to 2923 (Saturated)	180	4960	740	960	870
Allowance for empty and underloaded cars		Less than 40 M's		6	3	3	3
		40 to 50 M's		3	0	0	0

C. G. TANDY, Trainmaster..............Fresno
J. B. WILSON, Trainmaster ....Bakersfield
C. G. TROTTER, Ass't Trainmaster, Bakersfield

E. F. WASEM,
Chief Train Dispatcher.

R. M. McLEOD,
Asst. Chief Train Dispatcher

L. A. ROBERTS, Examiner.

Train Dispatchers
L. J. Baker
C. A. Glocksine
E. B. Curtiss
P. E. Turner
E. L. Braswell
L. G. Fell
F. B. Warner
E. P. Gibson
F. V. Collins,
J. S. Fockler
O. D. Day

C. F. DONNATIN, Superintendent.

P. SLATER, Asst. Superintendent.

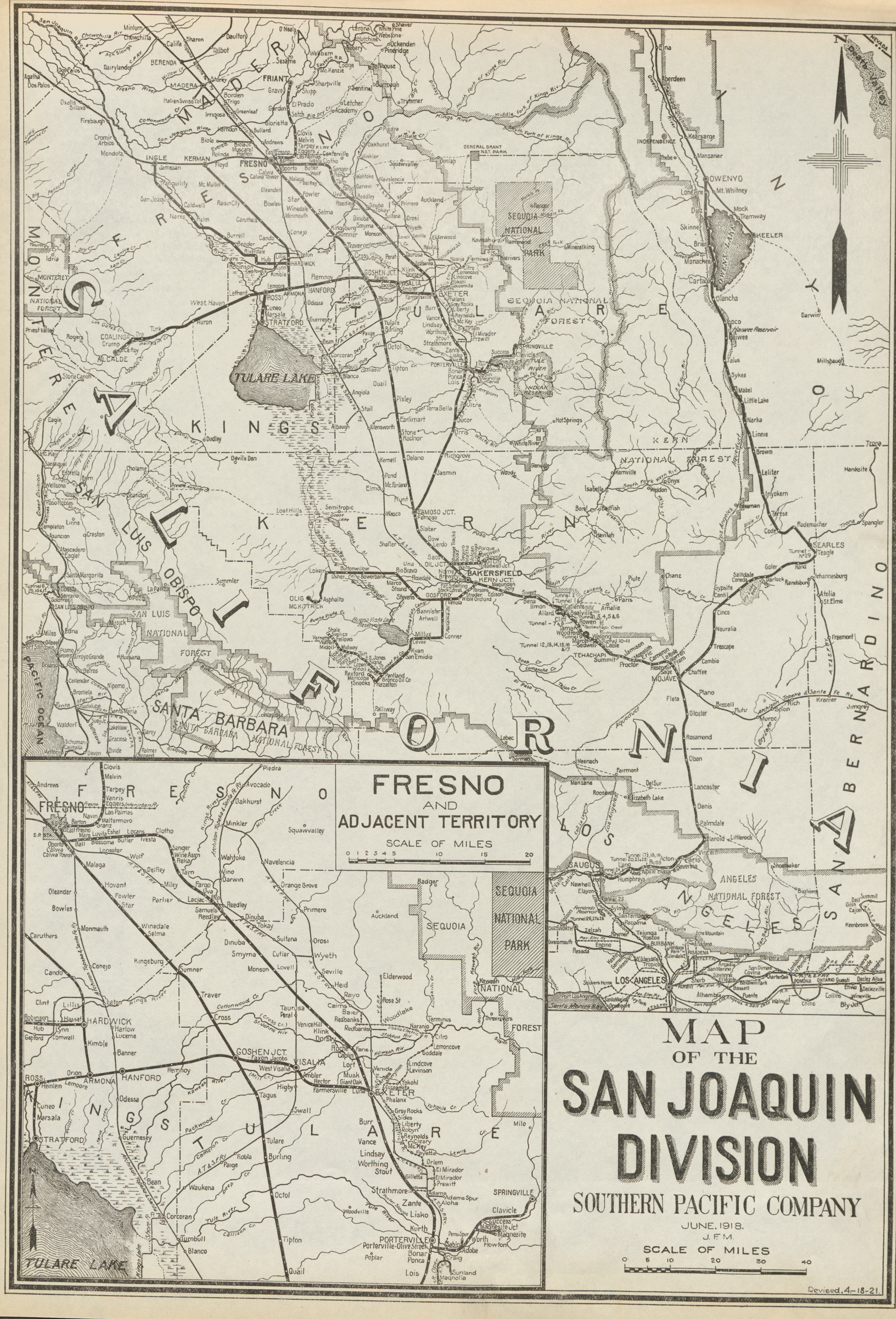
MILEAGE.

Main Lines

End Stockton Division to Fresno	S. P. R. R	.53	
End Stockton Division to Goshen Jct.	C. P. Ry	35.48	
Goshen Jct. to Saugus	S. P. R. R.	210.62	
Kerman to Goshen Jct.. Via Armona	S. P. R. R.	51.37	
Total Main Line			298.00

Branches.

Alcalde	S. P. R. R	Armona to Alcalde	44.32	
Asphalto	S. P. R. R	Bakersfield to Olig	50.06	
Clovis	S. P. R. R	Fresno to Friant	24.14	
Fresno	S. P. R. R	Fresno to Famoso	102.61	
Magnesite	S. P. R. R	Magnesite Jct. to Magnesite	2.44	
Owenyo	C. P. Ry	Mojave to Owenyo	142.90	
Riverdale	S. P. R. R	Hardwick to Ingle	42.16	
Springville	S. P. R. R	Porterville to Springville	15.83	
Stratford	S. P. R. R	Rossi to Stratford	8.25	
Visalia	S. P. R. R	Goshen Jct. to Exeter	16.76	
Total Branches				449.47
Total San Joaquin Division				747.47



CALIFORNIA
MADERA
FRESNO
TULARE
KINGS
KERN
INYO
MONTEREY
SAN LUIS OBISPO
SANTA BARBARA
LOS ANGELES
SAN BERNARDINO
NEVADA
PACIFIC OCEAN
TULARE LAKE
OWENS LAKE
SEQUOIA NATIONAL PARK
GENERAL GRANT NAT. PARK
SEQUOIA NATIONAL FOREST
KERN NATIONAL FOREST
SANTA BARBARA NATIONAL FOREST
SAN LUIS NATIONAL FOREST
MONTEREY NATIONAL FOREST
ANGELES NATIONAL FOREST
TULE RIVER INDIAN RESERVATION
FRESNO
MADERA
FRIANT
HARDWICK
GOSHEN JCT.
VISALIA
EXETER
HANFORD
ARMONA
ROSSI
STRATFORD
COALINGA
PORTERVILLE
SPRINGVILLE
FAMOSO JCT.
OIL JCT.
BAKERSFIELD
KERN JCT.
GOSFORD
TEHACHAPI
MOJAVE
SEARLES
OWENYO
INDEPENDENCE
KEELER
SAUGUS
LOS ANGELES
SAN LUIS OBISPO
FRESNO
AND
ADJACENT TERRITORY
SCALE OF MILES
0 1 2 3 4 5 10 15 20
SEQUOIA NATIONAL PARK
TULARE LAKE

MAP
OF THE
SAN JOAQUIN DIVISION
SOUTHERN PACIFIC COMPANY

JUNE, 1918.

J.F.M.

SCALE OF MILES

0 5 10 20 30 40

Revised. 4-18-21.